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REPORT

OF THE

Minister of Lands and Forests

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October

1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 7, 1930



TORONTO:

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1930



TO HIS HONOUR WILLIAM D. ROSS, ESQ.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to your Honour, Report on the Operations of the Department of Lands and Forests for the fiscal year ending 31st October, 1929.

WILLIAM FINLAYSON,
Minister.

HONOURABLE WILLIAM FINLAYSON,
Minister of Lands and Forests.

We have the honour to submit herewith a report on the operations of the Department of Lands and Forests for the fiscal year ending 31st October, 1929.

W. C. CAIN,
*Deputy Minister,
Lands and Forests.*

E. J. ZAVITZ,
*Deputy Minister,
Forestry.*

L. V. RORKE,
Surveyor-General.

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Report of the Minister of Lands and Forests of the Province of Ontario

For the Year ending 31st October, 1929

GENERAL ADMINISTRATION

In last year's report reference was made to the one hundredth anniversary of the appointment in the season of 1827-28 of the first Commissioner of Crown Lands for the purpose of administering the affairs of all the Crown lands of Upper Canada, and their co-related interests.

To mark this historic event and afford the officers and all the employees of the inside service of the Department an opportunity of learning something of the progress and development of this Department of Natural Resources, a special non-political centenary dinner was held in the large committee room of the Parliament Buildings on the evening of May 2nd, 1929.

Elsewhere in this report is reproduced the programme of the evening. The occasion was honoured by the presence of His Honour, the Lieutenant-Governor, and all the former Commissioners or Ministers of the Department still living, except Sir John Gibson, since deceased, who, though unavoidably absent, owing to illness, sent his keen regrets, recalled fond memories of his associations with the Department and expressed his kindest and sincerest hopes for the continued success of his old love.

Hon. E. J. Davis, Sir W. H. Hearst, Hon. Geo. H. Ferguson, the present Prime Minister; Hon. Beniah Bowman, Hon. James Lyons, and the present Minister, Hon. Wm. Finlayson, having in the order named each presided over the destinies of the Department at important periods of its development, formed the "old Chiefs" circle at the head table, where the Hon. Speaker of the House, W. Black, sat with Mr. C. E. Burton, representing the Pioneers of Upper Canada, and Mr. J. J. Murphy, representing the oldest living super-annuated official of the Department, in which he served for over fifty years.

A brief history of the origin and development of the Department in which, more than any other Department of the Public Service, criticism, romance and adventure each in itself has played its part, was given by the chairman. The former executive heads in order were introduced and each felicitously indulged in retrospect and prophecy, dwelling upon the tremendous growth and recognized importance of the Lands and Forests, and the need of a continuity and stability in administrative service.

Practically all the inside employees, to the number of one hundred and forty, attended the gathering and acquired new ideas and a more extended knowledge of the diversified nature of their work.

LEGISLATIVE ENACTMENTS

During the Session the Crown Timber Act was amended to provide for the suspension of the manufacturing condition as to poplar. This class of material is so prolific in growth and so widespread as respects our forest areas that unless

it is cut in comparatively early years its quality deteriorates and, as there are but limited markets in Canada for its use, provision is made for its export. In this way wastage is avoided and the young growth encouraged. Wherever the circumstances justify and export privileges are granted, cordage fee of a minimum of 50 cents, in addition to the regular price bid in public competition, is imposed.

A further amendment to the Crown Timber Act protects the Crown in its priority of claim in respect of lien on timber for dues and Crown charges.

The ever-pressing importance of the lumber and pulpwood industry and the admitted necessity of providing advanced Legislation were recognized in the Provincial Forests Act passed this year. Under this Act new areas were specifically designated as Provincial Forest Reserves while the older areas hitherto known as Forest Reserves were confirmed. The Act provided for the appointment by Order-in-Council of a special officer who shall have charge, control and management of the established Provincial Forests for the purpose of preserving them according to the best forestry practice and to gradually bring them under a sustained yield basis.

Mr. Frank Sharpe, F.E., who has been connected with the Department for a number of years in a technical capacity, was under date of 30th April, 1929, duly appointed officer in charge of such Provincial Forests.

The international interest manifested in the newsprint industry, which has so many ramifications, including the annual consumption and wholesale cutting, rivets attention on all practical proposals to perpetuate if possible, the source of supply.

With a view therefore to bringing the Department and the various operating companies into closer touch and to effecting a mutual *modus operandi* in the operation of the forests The Pulpwood Conservation Act was passed on the 24th March, 1929, and is now in operation.

Particulars in full detail are required to be furnished by each individual or company affected and hundreds of licensees, concessionaires and large holders have been circularized. Numbers of returns have been received and the data catalogued by the Department preparatory to placing the information before the Forestry Branch for its attention. All those interested are sympathetically co-operating with the Department, it is believed, in an attempt to sustain the annual yield and provide for a perpetuation of the industry by assuring rotation of crops. Adequate results can be best measured after the Act has been in operation for a period of years, but the response given by the substantial investors in the forest assets is proof of a concerted desire to assist in making decided progress under the Act, declared by accepted authorities to be the most advanced form of pulpwood conservation legislation yet enacted.

LAND TRANSACTIONS

The ever recurring question of how best to promote land settlement in pioneer stages and in areas demanding the toilsome effort of removing virgin timber and subsequently tilling the cleared portions is one that admits of a variety of suggestions and involves a problem that is world wide in the attempt to find a solution. When in the older parts of the Province large areas of cleared and arable land, awaiting only the application of individual effort, lie unoccupied and unimproved and no appreciable response has been made to the nation wide urge to get back to the land, it is obviously difficult to secure for and keep upon the land in the newer parts the right type of settler. Although

each district of Northern Ontario has its own attractive features from an agricultural point of view any measures adopted with a view to the settlement of a particular section to the exclusion of another would be instantly seized upon as sectional legislation and in consequence land regulations must in the main be of a uniform nature with sufficient elasticity to meet local requirements.

The basic principle has been laid down and is being followed that unless an area is primarily adapted to farming and carries with it the prospects of continuous production it is not now opened for settlement. Years ago, when a mistaken idea was prevalent that the timber resources were inexhaustible, but little attempt was made towards segregating areas, the result being that extensive sections were thrown open for promiscuous settlement with dire results in many instances both to the farming and lumbering interests. Many of the present day problems of the Department are directly traceable to such injudicious treatment.

In Old Ontario much of the land opened for settlement was allocated under the Free Grant Act within territory generally speaking covered by Timber Licenses, and more or less unsuited for real settlement. Certain lots within a given area would be taken up and after the timber was harvested without any co-related move to cultivate and produce they were abandoned. Other lots, in pockets of alluvial soil, yielding to the intensive and persistent efforts of the well intentioned pioneer, became in the fullness of time productive farms and in part redeemed an otherwise pitiable situation. But at best such settlement was isolated and lacked the community benefits of a compact one.

In a timbered area where land is of an agricultural character the cutting of the timber and the harvesting of it is inseparably tied up to the land settlement and cultivation.

To avoid the folly of the past a rigid enforcement of the regulations is being followed with a sane and reasonable encouragement to the bona-fide settler. The gradual cutting of his timber in conjunction with an effort to clear and improve the land is now being checked up under a system of permits and clearances. This operates to the advantage of the man who intends to stay and to the disadvantage of the timber farmer or bird of passage, whose prime purpose is to exploit the timber.

Appendices 12 and 13 of this report show detailed statements of all transactions covering both the Free Grant and Purchased Lands. While 538 persons availed themselves of the opportunity of acquiring Free Grant Lands no less than 504 forfeited their rights due to failure to meet settlement obligations, and of these thirty per cent. was in Southern Ontario, where 36 fewer located and secured Free Grants than the number cancelled. In the same area, however, 91 received Patents on completion of settlement duties.

The settled policy of the Government to discourage settlement on worn out land, or within areas more likely to be productive of timber growth, accounts largely for the gradual though effectual reduction in location in Southern Ontario. In the Northern part where Free Grant lots are procurable 426 were located against 356 cancelled, while 145 proved up and received patents.

In the District of Cochrane, in the Northern Clay Belt, where there are wide stretches of pulpwood extending along the Transcontinental Railway in townships that contain excellent farm land the vigilance of the Department's officials resulted in the spurious settlers, the wood exploiters, being closely checked and their claims cancelled. The insistence of the officials in carrying out directions has fortunately operated against this type of so-called settler, and yet it so frequently occurs that he initiates an agitation amongst and gets

the sympathy of a certain element of the section who press for a relaxation of the Regulations and effect a real knowledge of the situation when but an apparent one exists. In all districts where substantial pioneer efforts are being made the officials of the Department extend the most courteous treatment and through the regular visitations of the Supervisor of Settlement misunderstandings have been removed and, according to this officer's report, fewer complaints have been heard during the past year.

The settlers of the north who for three years suffered, owing to the extremely wet weather which adversely affected the harvesting of their crops, were mostly blessed during the past year with good crops and favourable weather for harvesting them. The Homestead Inspectors who are in direct touch with the settlers are visited periodically by the Supervisor, who assists in the adjustment of disputes on the ground and sympathetically co-operates with the settler in offering him advice and giving him encouragement in his work.

The experiment of moving a certain number of settlers from Old Ontario to the Southern Clay Belt in Timiskaming District, has been to date successful. Those that treked north are doing well and report says they are pleased with their new conditions and express the hope that others shall in due time, when thoroughly satisfied with the success attendant upon the undertaking, follow the lead now given.

INDIAN RIGHTS CEDED

The negotiations between the Province and the Dominion covered in last year's report with regard to concluding a Treaty with the Indians inhabiting that far flung portion of Ontario lying north and west of the Albany River, resulted in the appointment of Commissioners Walter C. Cain, Deputy Minister of the Department of Lands and Forests, nominated by Ontario, and H. N. Awrey, representing the Department of Indian Affairs.

To meet the Indians and consummate a Treaty an itinerary covering the summers of 1929 and 1930 was adopted, and in pursuance of same the Commissioners proceeded by plane to Trout Lake some 800 miles north of Toronto and enrolled over six hundred Indians at this point and an additional fifty at Lansdowne House, a rendezvous about sixty miles due north of Fort Hope.

Next summer the work will be completed, the programme providing for the taking of surrenders at three other points, including one in the neighbourhood of Wendigo Lake and the other two on the Hudson Bay at the mouths of the Severn and Winisk Rivers. Approximately one thousand additional Indians are expected to sign treaty.

The termination of these surrenders will mean the acquirement by cession from the Indian bands of that region, the only remaining territory in Canada up to then unceded. A detailed report of the work of the Commissioners during the summer of 1929 will be found in the annual publication of the Department of Indian Affairs for this year.

OLD SALES

Numbers of farm lots sold long ago, many prior to Confederation, remain unpatented, though occupied, due to neglect of the original purchasers or their successors in title to pay arrears due the Crown. Though periodic demands have been made and reasonable efforts taken to collect the amounts owing up until lately little response to appeals resulted. A determined move on the part of the Department during the past year, involving a follow-up system,

and negotiations with township municipal officials, has caused substantial numbers to meet the requirements and secure patents. Where satisfactory evidence is submitted showing occupation, improvements and no adverse claim, and the case has been long standing, consideration for a fair reduction of the amounts owing, as provided in the Act, will be given.

CLERGY SALES

On former sales under the heading the sum of \$3,200.60 was collected as against \$455.95 for the previous fiscal year.

COMMON SCHOOL LANDS

Collections from this source accounted for \$3,650.88, nearly four times that received last year.

UNIVERSITY SALES

Some 314.25 acres were sold and on these and previous sales the sum of \$543.75 was received.

GRAMMAR SCHOOL LANDS

Arrears on these sales to the extent of \$945.17 were collected.

CROWN LANDS

For settlement, tourist, townsite and other purposes the total area sold and leased comprised 89,529.54 acres, for which \$137,245.47 was received. In addition the sum of \$233,171.29 was collected in former sales and leases. For details covering the last five headings see Appendix 3.

PROVINCIAL LAND TAX ACT

Revenue derived from this source amounted to \$127,580.59, a sum somewhat less than for the fiscal year ending Oct. 31, 1928. The revenue during the year 1928 included certain arrears carried forward from the first year of operation. Last year's report indicated limited opposition to this tax, which was not unanticipated, but it came largely from small holders and owners of farm and town lots, many of whom did not realize that bona-fide settlers were exempt from taxation, and that satisfying the Department in this regard was all that was required. Because of doubts entertained by those the Act intended to exempt and complaints that in the operation of the Act payments were made through error the question of removing cause for complaints by amending the Act is worthy of consideration.

The tax is applicable only to property in unorganized districts and special provision is made to apply to owners who may be situate in school sections and assessable for school purposes. The general principle of taxing property, otherwise free of such, in unorganized territory for the purposes of assisting in partly defraying expenditures for benefits received, such as highways and other developments, does not seem unjust and this Act aims to meet such a situation. Since the Act came into force in 1927 the sum of \$361,221.10 has been received, while the total cost of organizing and of administering the special branch has been nine per cent. of the revenue.

MILITARY GRANTS

These grants were confined to veterans of 1866 and those of the South African war, the total number receiving certificates entitling each recipient to 160 acres free being 13,998. Of these approximately 1,000 are still outstanding and as the time in which to locate land has long since passed, the only transactions are those where the certificates are accepted a script and applied on land to the face value of eighty dollars each, or surrendered to the Crown for a cash consideration of fifty dollars. Only one such certificate was surrendered throughout the fiscal year just closed and the clerical work in connection with this service has been limited to checking up old locations and making searches in respect of ownership.

A general résumé of the operations in this field of land administration was given for reference purposes in the Minister's preface to last year's detailed report.

GREAT WAR VETERANS

Though sympathetic encouragement was directed to the returned soldiers of the Great War to the extent of permitting each to take free for settlement purposes 160 acres in any section regularly opened for farming, comparatively few took advantage of the opportunity and generally speaking the success attained has not been very outstanding, as is indicated by the figures for the year, there being but 38 locations while 59 individual holdings were cancelled.

PATENTS

Over 200 more instruments were issued than during the year 1928. These comprise in number 2,156 and include those covering grants of lands for agricultural, mining, park, summer resort, sand and gravel, water power and other purposes. The work in this office is of a dual character covering the engrossing of mining documents as well as those particularly relating to lands and forests. For details see Appendix No. 14.

COMMUNICATIONS

Exclusive of the Minister's office, the Provincial Land Tax Branch, and the Forestry Branch, over 55,000 letters or communications were received and nearly 48,000 sent out of which sixty per cent. reached the general public, the remainder the outside service. (See Appendix 15).

PROVINCIAL PARKS

Increasing interest is being manifested in the beauties and attractions of our great national playgrounds. Ontario is especially and profusely endowed by nature in this respect.

Algonquin Park in the Ottawa and Muskoka River watersheds offers an inviting field for lovers of solitude, students of nature, scientific investigators, forest scholars and seekers after health and summer or winter sports.

The Department of Lands and Forests that administers the parks of the Province has its headquarters for Algonquin Park on Cache Lake, on the Canadian National Railways, formerly the Canada Atlantic. The buildings consist of the Superintendent's house and office, Rangers' boarding house, work shops, boathouse and other necessary structures including a concrete

animal house to accommodate live wild animals. The staff consists of the Superintendent, two Chief Rangers, 27 Park Rangers, office assistant and house-keeper, a total force of 32.

Located at strategic points throughout the park are shelter houses for the accommodation of the Rangers on patrol duty and for the convenience of tourists in emergencies.

The development during recent times of summer camps for adults and youth in no section of Canada is so pronounced as in Algonquin Park. At present there are twelve large camps, each having accommodation for 100 to 500 individuals. Separate camps for boys and girls have been judiciously organized and highly developed on moral, educational, athletic and sanitary principles, the patrons representing important though widely separated sections of the United States as well as Canada. It is interesting and encouraging to observe that new camps are under consideration which will mean an additional contribution towards the upkeep of the park and an increase in the number of summer visitors.

The tourist travel during the past year was largely in excess of any previous one and the record number of anglers visiting the park emphasizes the fishing possibilities as one of its greatest assets and finest magnets. The hotels and summer resorts were filled to capacity and the receipts from anglers' licenses the highest on record. As the angling by summer tourists is more or less concentrated in the waters nearby headquarters there is a decided need for replenishing these and to accomplish this in due course it may be advisable to start a hatchery. The fishing is exceptionally good in the lakes and streams a few miles from the railways and in the interior of the park.

Under the patrol system every section of the park area comprising 2,749 square miles, is covered at intervals and during the year 11 convictions were recorded for violation of the park laws. A rigid enforcement of the regulations is producing the desired result and a wholesome respect is being shown the laws.

Notwithstanding the very dry season, the park was almost free of fires. The constant vigilance of the staff in maintaining a check on the action of campers and fishing parties acts as a deterrent to carelessness.

Guides to the number of 89 were employed in conducting parties on trips, each guide being required to procure a license and to furnish information regarding their activities, report fires immediately, the condition of trails, canoe routes and portages, all of which operates in maintaining an effective system.

GAME AND PREDATORY ANIMALS

Reports from the Superintendent indicate that notwithstanding the wolf menace, at times it is felt unjustifiably charged against the park, there has been a decided increase in the number of game animals within the park. Although all the members of the ranging staff were solicitous in regard to killing wolves they succeeded in securing only 32 during the fiscal year just ended.

Rondeau Park nestling snugly in the southwest part of the Province, midst arboreal surroundings, in Kent County, comprises a peninsula, extending into Lake Erie, of 5,000 acres, with a beautiful sand beach sweep of several miles on the lake and an enchanting shore line on the "Eau," with a summer population of 1,000 who are comfortably and conveniently housed in quaint cottages built by individual owners under a leasehold arrangement on a twenty-one year tenure, the park presents a modern recreational rendezvous.

The increased demand for lots has necessitated an additional subdivision and plans are being prepared with this end in view. A public pavilion and a restaurant, the privileges of which are covered by concession, serve the public, while special picnic parties find fine accommodation in the various accessories furnished by the government. A virginal mixed forest, consisting of a great variety of timber types, characteristic of southern Ontario, invites the traveller seeking the shadows of the oaks and longing for the whispering of the stately pines. To commune with nature in its greatest display of tree growth, and yet be within ready range of the joyous throngs in their merrymaking, is the lot of the visitors to this park. Wild life is represented by red deer, the Canada goose, variegated pheasants and a host of winged songsters. To visit this gracious treasure house of verdant beauty and quiet retreats means a lingering desire and a determination to frequently revisit it.

QUETICO PARK

Quetico Park, in the Rainy River District on the international border, comprising over one million acres is a real centre for wild life. Game is very plentiful and the protection furnished by the government through the staff of rangers affords a great radiating centre for fur-bearing animals. The tourist traffic through the park the past year was the heaviest on record. The proximity of the American Republic lends easy access to the waters of the park where excellent fishing is enjoyed.

The park staff consists of a superintendent, chief ranger, fourteen rangers and a housekeeper. In addition to headquarters there are thirty-six stop-over cabins for use of the staff patrol. Marked portages enable the tourist to more readily make progress in his meanderings through the recesses of the park which nature has so richly endowed.

The ease with which aerial travellers can now cross over the boundary and swoop down on attractive lakes and be free to break park regulations without much fear of being apprehended by foot or water patrols justifies a reconsideration of the regulations and penalties for their violation. Drastic steps may be taken towards seizing and confiscating even aircraft machines when found breaking the regulations. Travel permits on a fee basis, in addition to fishing licenses, will hereafter be required.

The rangers killed fifteen wolves, eight brush and seven timber ones during the year.

As the great fishing and recreational features of this park are becoming more known a keener appreciation of its value is being shown by our own people who are urged to visit the area rather than look outside of our own province for that which is incomparably less attractive.

SURVEYS: WATER POWERS AND ENGINEERING

The survey of Crown lands, carried on during the year, consisted of the running of base and meridian lines, township outlines, lake and river traverses, summer resort and miscellaneous surveys.

The preliminary survey to locate the Ontario-Manitoba boundary line, from the twelfth base line of Dominion Surveys to the most eastern point of Island Lake, was performed under instructions from the commissioners, the Surveyor-General of the Province and the Surveyor-General of Dominion Lands, by Ontario Land Surveyor J. W. Pierce.

Co-operation with the Dominion Government's aerial photographic work was carried on by making control surveys on the ground for the purpose of definitely fixing points on the aerial maps.

The total expenditure under survey work for the past year was \$122,058.55, being an increase of \$10,209.12 over the former year's expenditure.

During the past year the development of water powers consisted of a development by the International Nickel Company, Limited, of Canada at "Big Eddy" Dam, on the Spanish River, to the extent of 28,200 horsepower. 11,000 horsepower was installed at High Falls on the Michipicoten River by the Algoma District Power Company.

The Hydro-Electric Power Commission of Ontario have completed development of 2,200 horsepower at Trethewey Falls on the South Muskoka River; 1,000 horsepower at Elliott Chute on the South River and 5,000 horsepower at Lower Ear Falls on the English River. The Commission are also carrying on construction for the development of 54,000 horsepower at Camp Alexander on the Nipigon River.

The construction of the Lac Seul Conservation Dam, as per contract with Messrs. Morrow & Beatty of Peterborough, was duly completed on the 1st May, 1929, and the dam put into operation.

The revenue from water power rentals was \$204,857.14, being an increase of \$50,406.29 during the past year.

Several plans and specifications of dams to be constructed or repaired on different streams throughout the province have been filed for approval, as required under the Lakes and Rivers Improvement Act.

TIMBER ADMINISTRATION

Throughout the year the department, desirous of continuing the accepted policy of providing for old and existing rather than for new and prospective industries, limited the sales of large areas to those where representatives of going concerns applied.

The question of the disappearance of the forests by more than a gradual process is no longer a debatable one. The general public, through a continuous educational campaign carried on by the press and government, freely admit the need of providing and taking advantage of every means to conserve the forest growth and at the same time seek to stabilize the great industry that has through several generations grown to such tremendous proportions.

Legislation, to which reference has already been made under heading of "Legislative Enactments," is a most powerful instrument towards giving the "punch" to enforcement. Sympathetic co-operation between the government and timber operators has been so effective during the last few years that the old barriers of individual prejudice and attempts to bleed the forests which kept the state and the operator apart, are almost entirely broken down. The old practical idea has given way in part to the technical and the latter in turn to the former, each recognizing that the practical and theoretical can be made to harmonize to the economic advantage of both. The impossibility of creating an international or even a Dominion-wide stabilizing or standardizing force to maintain a proper balance of trade in the lumber and pulp business creates an uncertain situation in the manufacturing field. Prices and production with their attendant problems are factors that demand an astuteness and acumen in all industries of the present day depending upon forest products. Southern and western imports of certain types of lumber and building supplies, resulting from cheaper labour, compete with and often undersell Ontario products while an over-production and

lack of business frankness, and, to a limited extent, European importations, in connection with the pulp and paper enterprise, are reflected in decreased output and unstable employment. It is hoped that in due time the situation, gradually improving, will be completely adjusted and the community centres that have developed about and relied upon a full-time plant operation will become more buoyant.

It is interesting to observe that all agencies directly or indirectly associated with the forest products industry are animated with a desire to work harmoniously towards a common end of perpetuating, so far as it is humanly possible, the natural forest wealth. Much indeed is written nowadays concerning an approaching world shortage of raw material. Ontario, while singularly favoured above most countries, in respect of its timber supplies, must by reason of this very fact ever look forward, and in its administration of the timber resources consider its great tracts of wooded land as a real capital investment that must yield a fair annual return not only for the present generation, but for generations yet unborn, and with the acquiescence of the general public and the practical co-operation of the interested dealers a solid foundation is being laid upon which a proper superstructure can be effectively built.

AREAS SOLD

Fifty-two areas ranging in size from one-quarter square mile to 975 square miles, were sold under advertised public competition. Thunder Bay District was credited with twelve, Timiskaming with ten, Cochrane with nine, Kenora with seven, Rainy River with six, Sudbury with five, Algoma with two, and Nipissing with one. Of these, nineteen were exclusive logging propositions, largely red and white pine and jackpine with a percentage of spruce, all being acquired for the manufacture of lumber. Thirteen were mixed timber operations comprising logging for saw milling, cutting pulpwood and making ties. Pulpwood areas accounted for fourteen sales, and fuelwood, tie-making and clean-up logging for the balance. In seventy-five per cent. of the sales the Crown received bids above the upset price and in no case was an area sold at less than the price fixed in the advertised conditions. The prices bid and successful tenderers may be seen by a reference to Appendix No. 11. A perusal of this tabulated statement will disclose that with the exception of certain small areas, covering one square mile or thereabouts, where small jobbers find it convenient to invest and do a logging business on a scale proportionate to their means, the limits were acquired by active operators who are operating mills and employing labour throughout the summer and winter seasons.

The largest area disposed of comprised 975 square miles in the Sudbury District, the successful tenderer being the Howard Smith Paper Mills, Ltd., who operate a very large mill at Cornwall. This company have been depending partly on raw material imported into the province and that secured from the settlers or private owners. The indeterminate nature of this arrangement placed the company in a position where security of continuing an Ontario concern was uncertain. Consequently the company for some years had been seeking a home supply that greater stability would be assured. Their rights on the limit have been restricted to spruce, balsam and poplar pulpwood, the log timber being free for disposition on the part of the Crown.

LOGGING

The area under license, exclusive of that covered by pulp concessions proper, was 19,608 square miles and the number of licenses issued was 953. The actual

quantity cut of red and white pine, while less by over five hundred thousand pieces, was practically the same as the year 1928, there being 207,742,496 feet B.M. against 210,532,068 for the former year, the average log content being five feet higher during the past year. Jackpine taken out in logs for mill operations totalled 72,891,128 feet B.M., nearly one million feet in advance of the previous year. Operations in respect of other logs such as spruce, hemlock, hardwood, etc., exceeded the year previous by over 550,000 pieces and by 6,700,000 feet B.M. An increase in railway ties manufactured in the bush was marked to the extent of nearly 200,000, the quantities reaching 1,916,686. There were over 10,000 more cedar posts taken out.

Considering the various factors that tend to operate against the constant buoyancy of the great logging and lumbering industry, including amongst others the vagaries of the weather, the many wood substitutes, keen outside competition, the flexibility of the building trade and the fluctuating markets, it is most satisfactory to note that the "lumberjacks'" optimism tides over evil times and always hopes for, if not prophesies, good times. A period when business is good is genuinely reflected in bush undertakings and if the present tone displayed at the beginning of another season is a fair criterion of next winter's work, then the prediction is justified that a successful season looms ahead for the logging manufacturer and his bush employees. For tabulated statement of cut see Appendix No. 8.

(PULPWOOD OPERATIONS)

Predictions in last year's report that the general situation obtaining in connection with the newsprint industry would be reflected in a decreased cut of pulpwood, have been borne out by the returns. During 1928 Crown lands accounted for 684,582 cords, while 1929 accounted for only 461,992 cords, or a decrease of 222,590 cords. The decrease in the cut on settlers' and patented lands was even more noticeable, there being cut during the year but 659,868 cords therefrom, less than the previous year by 451,356 cords.

Only 428,451 cords were exported as against 612,000 cords for 1928, or about sixty-four per cent. of the total exportable quantities.

Seventy-four per cent. of the exportable material came from patented or privately-owned lands over which the Crown has no control.

Through the Supervisor of Operations and the various staffs under the different Crown timber agents careful inspections are being periodically made and rigid though reasonable enforcement of the cutting regulation is pursued. The sympathetic attitude of the operators towards the government in its efforts to see cutting done judiciously and economically is to be commended.

There is every reason to hope that when the Pulpwood Conservation Act, to which reference has already been made, is operating fully along the plans laid down and fire preventive measures are tightened up, an improved situation will result and a further important step taken towards a rotation of crop and a perpetuation of forest growth.

FOREST FIRE PROTECTION

With a view to segregating certain areas, within which travel permits are necessary, regulations were passed by which certain old areas, mostly patented land, hitherto comprised within fire districts, were withdrawn from travel permit operations and other and less occupied sections were included. Conditions were provided to govern the making of fires out of doors for cooking or obtaining warmth.

The fire-fighting force during the past year was subjected to the severest test of its existence. Abnormal fire hazards occurred in every district of the province. The number of fires was 1,550, or nearly three times those of 1928, and yet the burned area in territory under protection was limited to 625,643 acres. Of this area over ninety per cent. was in the north-west part of the province, lying west of Lake Nipigon.

A redeeming feature of the situation was the fact that the timber land burned over was less than twenty per cent. of the total area burned. Certain fires occurred in the districts that were beyond the reach of the patrol and fighting staff, a circumstance which justifies the need of additional air craft and other necessities to meet new conditions arising in outlying parts due to mining and exploration activities. Campers, including prospectors, berry pickers and tourists accounted for no less than 26.7 per cent. of the fires, lightning for 16.1 per cent.; railways for 12 per cent.; smokers 10.3 per cent.; settlers, 7.2 per cent., and logging operations, road-building and miscellaneous causes (including unknown—18 per cent.) accounted for the balance. See Part II of this report for details.

FOREST SURVEYS

Aerial forest type mapping was carried on largely in the Nipigon area, although late in the season some eight townships in the provisional County of Haliburton, in old Ontario, were covered. In the former section 12,000 square miles were undertaken as a preliminary inventory of timber resources.

Aerial photograph survey was conducted in five separate operations covering some 2,000 miles, part of the work being based on vertical photos and part on obliques.

Eighteen radio stations were operated during the year at various points. See complete reference in Part II.

REFORESTATION

Nursery operations on an extensive scale were continued at the different stations, a comprehensive report on which may be had by referring to 1 Part II of this report.

REVENUE

In over 100 years since the appointment of the first Commissioner of Crown Lands in 1827-28, when the timber revenue was a few hundred dollars, the gross revenue of the department was the largest in 1929. The sum of \$5,059,878.20 was collected and of this \$4,326,344.99 is directly due to timber administration, the balance to the sale and lease of lands, water powers, rentals, land tax and incidental items. Of the total received \$3,729,554.12 was ordinary revenue and \$1,330,324.08 capital. This represents an increase of ordinary revenue over the previous year by \$172,091.43 and of capital by \$146,557.46.

The timber revenue includes ground rent and fire protection charges which account for \$462,867.91.

Rentals on Crown leases, water powers, etc., netted \$243,645.74.

For details respecting source and figures of revenue see Appendices 3 to 6 inclusive.

It is not anticipated that the revenue for the coming year will be nearly so much. While in certain sections the timber cut may equal last year's the material is lower priced and this will be reflected in a reduced revenue.

DISBURSEMENTS

Expenditures for the year totalled \$3,405,615.46, of which \$2,179,850.23 was ordinary and \$1,225,765.23 capital. The largest item of expenditure is for fire-ranging, the cost of same being \$1,677,671.00, over \$450,000 in advance of the previous year. The exceptionally dry season with its many fires created a situation that taxed to the utmost the fire-fighting staff and caused the increase in expenditure over the year 1928. Forest ranging accounted for an expenditure of \$456,842.02, a slight increase over last year, while reforestation cost \$385,409.77. The sum of \$122,058.55 was spent on surveys, while \$159,567.93 went towards the construction of the Lac Seul Dam of which sixty per cent. is repaid by the Dominion Government. For the other items included in disbursements, see Appendix No. 7.

APPENDICES

PART I

Appendix No. 1

Return of Officers and Clerks of the Department of Lands and Forests, for year ending October 31st, 1929.

Branch	Name	Designation	When Appointed	Salary per Annum	Remarks
Main Office	Finlayson, Hon. Wm.	Minister	1926, Oct. 18	\$8,000 00	
	Cain, W. C.	Deputy Minister	1903, Mar. 1	6,000 00	
	Ferguson, A.	Assistant to Deputy Minister	1915, Dec. 15	3,150 00	
	Thompson, J. B.	Minister's Secretary and Dept. Secretary	1925, Feb. 2	2,700 00	
	Bliss, M. E.	Secretarial Stenographer	1909, Aug. 16	1,600 00	
	Halliday, E. G.	Clerk, Group 1	1907, Feb. 21	1,600 00	
	Harrison, E.	Senior Clerk Stenographer	1920, May 14	1,500 00	
	Molesworth, V. M.	"	1928, April 10	1,300 00	
	Budd, F.	Office Boy	1927, Nov. 4	600 00	
	Kelly, J. P.	Vault Caretaker	1927, April 19	1,300 00	
Solicitor's Branch	Titus, F. E.	Solicitor	1920, Mar. 2	3,500 00	
	McLeod, L.	Clerk Stenographer, Group 1	1925, June 9	1,125 00	
Lands Branch	Draper, S.	Chief Clerk	1900, May 1	3,300 00	
	Ledger, W. R.	Principal Clerk	1894, Feb. 15	2,400 00	
	Burns, C. E.	"	1897, July 29	2,400 00	
	Drinkwater, J. E.	Senior Clerk	1915, Oct. 19	2,100 00	
	Sutherland, W. S.	"	1900, Mar. 18	2,000 00	
	Roe, A. E.	"	1906, Oct. 16	2,000 00	
	Lucas, F. A.	"	1906, Dec. 18	2,000 00	
	Platt, S. A.	"	1905, June 12	2,000 00	
	Robillard, A. E.	"	1894, May 4	2,000 00	
	Hutcheon, J.	Clerk, Group 1	1923, Nov. 22	1,500 00	
	Benson, B. M.	" 1	1909, May 25	1,600 00	
	Carey, A. R.	" 2	1925, July 7	1,050 00	
	O'Neil, E. F.	" 1	1902, July 7	1,600 00	
	Ross, S.	Senior Clerk Stenographer	1917, July 9	1,500 00	
	Hills, E.	Clerk, Group 1	1912, July 2	1,600 00	
	Griffith, F.	Clerk Stenographer, Group 1	1921, Jan. 22	1,200 00	
	Pepler, A. V.	"	1922, Sept. 24	1,200 00	
Sutherland, M. I.	"	1921, Jan. 22	1,200 00		
Burke, M. G.	"	1928, Jan. 9	1,050 00		
Feehly, R. M.	"	1928, April 2	1,050 00		
Stephens, A. M.	"	1927, Oct. 4	975 00		

Died July 11th, 1929.

Woods and Forests Branch.....	Houser, J.....	Chief Clerk.....	1905, July 17	3,150 00
	Gillard, H. D.....	Principal Clerk	1897, Dec. 6	2,400 00
	O'Neil, A. H.....	"	1906, July 19	2,100 00
	Meeking, S. D.....	Senior Clerk.....	1910, Feb. 8	2,000 00
	Teller, E. H.....	"	1915, Sept. 27	2,000 00
	Potter, G.....	Clerk, Group 1.....	1923, June 1	1,600 00
	Squire, E. H.....	"	1916, Jan. 4	1,600 00
	Quigley, E. F.....	"	1921, May 4	1,300 00
	McCord, W. A.....	"	1926, May 26	1,400 00
	Armer, E. C.....	Senior Clerk Stenographer.....	1909, Aug. 6	1,500 00
	Bryce, J. J.....	"	1922, July 24	1,300 00
	Ferguson, J.....	"	1919, Aug. 4	1,300 00
	Stewart, F. E.....	Clerk Stenographer, Group 1.....	1927, July 25	1,125 00
Accounts Branch.....	Lount, H. M.....	Accountant, Group 2.....	1903, Oct. 1	3,000 00
	Clarke, C. J.....	Principal Clerk.....	1905, Aug. 9	2,400 00
	Burritt, W. A.....	Senior Clerk.....	1907, Sept. 24	2,000 00
	Gordon, R.....	Clerk, Group 1.....	1912, July 30	1,600 00
	Warren, J. F.....	"	1922, June 5	1,600 00
	Donald, L. G.....	"	1924, June 2	1,400 00
	Bryson, J.....	"	1927, Jan. 4	1,400 00
	Rowland, C.....	"	1908, July 9	1,600 00
	Whyte, M. A.....	"	1921, June 1	1,300 00
	Cox, M. E.....	Clerk Typist, Group 1.....	1924, Oct. 27	1,200 00
	Fox, E. M.....	Cheque Writer, Group 2.....	1927, Jan. 11	1,125 00
	Armitage, M.....	Clerk Typist, Group 2.....	1927, Oct. 18	825 00
	Files Branch.....	Burdin, S. K.....	Senior Clerk.....	1916, April 6	2,500 00
Samuels, F.....		"	1903, Dec. 5	1,900 00
Lee, J. T.....		"	1917, June 25	1,800 00
St. John, W. C.....		Clerk, Group 1.....	1906, July 9	1,500 00
Mathewson, N. B.....		"	1915, May 7	1,600 00
Mulholland, S.....		"	1918, May 6	1,400 00
Black, R. N.....		"	1915, Dec. 13	1,400 00
Harris, G.....		"	1925, Jan. 14	1,400 00
Smith, C. J.....		"	1928, April 14	1,300 00
Brophy, H.....		Senior Clerk Messenger.....	1898, Oct. 1	1,300 00
Ryan, L. M.....		Land Tax Collector.....	1925, July 1	2,400 00
Hinton, G. J.....		Clerk, Group 1.....	1925, May 4	1,500 00
Lyons, H. M.....		Clerk Stenographer, Group 2.....	1926, May 31	975 00
Deacon, C. H.....	Clerk, Group 2.....	1927, Sept. 29	975 00	
Riches, E. P.....	Clerk Stenographer, Group 2.....	1925, Aug. 10	975 00	
Madill, S.....	"	1927, July 14	900 00	
Stephens, F. E.....	"	1926, May 27	900 00	
Provincial Land Tax Office.....				

Superannuated as from Aug. 1st, 1929

Resigned July 31st, 1929.

Superannuated May 16th, 1929.

Appendix No. 1—Continued

Return of Officers and Clerks of the Department of Lands and Forests, for year ending October 31st, 1929.

Branch	Name	Designation	When Appointed	Salary per Annum	Remarks
Surveys Branch	Rorke, L. V.	Surveyor General	1909, May 1	5,000 00	
	Butterfield, J. E. C.	Assistant Inspector of Surveys	1927, Jan. 17	2,700 00	
	Heath, W. H.	Geographer	1923, Nov. 28	2,550 00	
	Barnard, W. A. C.	Senior Map Draughtsman	1928, Jan. 1	2,200 00	
	Burwash, N. A.	Surveyor and Sen. Draughtsman	1917, April 26	2,300 00	
	Work, J.	Principal Clerk	1909, May 18	2,400 00	
	Jarvis, E. M.	Senior Clerk	1897, April 25	2,000 00	
	Treby, H.	Map Draughtsman	1897, May 8	2,000 00	
	Blanchet, F. E.	"	1906, May 15	2,000 00	
	Leaman, A.	"	1907, Sept. 12	2,000 00	
	Barr, F. L.	Draughtsman	1923, Oct. 31	1,700 00	
	Vance, V.	Clerk, Group 2	1924, Sept. 10	975 00	
	Dennis, S. O.	Clerk Stenographer, Group 1	1910, April 5	1,200 00	
	Stork, G. E. M.	"	1927, July 28	1,050 00	
	Forestry Branch	Zavitz, E. J.	Deputy Minister of Forestry	1905, May 1	5,200 00
Mills, C. R.		Assistant Provincial Forester	1921, Mar. 28	4,000 00	
Richardson, A. H.		Forester	1921, June 15	3,150 00	
Johnston, R. N.		"	1915, Aug. 15	3,150 00	
Sharpe, J. F.		Forester, in charge of Prov. Forests	1922, May 15	3,150 00	
Westland, C. E.		Assistant Forester, Group 1	1923, May 16	2,200 00	
Bayly, G.		"	1924, Mar. 1	2,200 00	
Bishop, J. M.		Draughtsman	1924, Nov. 1	1,800 00	
Rogers, N. L.		Senior Clerk	1911, Aug. 1	2,000 00	
Harris, G. W.		"	1906, Sept. 1	2,000 00	
Cooper, E. W.		Clerk, Group 1	1921, Jan. 6	1,600 00	
Rowland, M. C.		Senior Clerk Stenographer	1912, May 1	1,500 00	
Bald, J.		"	1913, June 12	1,500 00	
McKyes, A. S.		"	1921, May 9	1,300 00	
Cuthbertson, F. A.		Clerk Stenographer, Group 2	1926, Nov. 9	1,050 00	

Appendix No. 2

List of Agents for the year ending October 31st, 1929

Name	Post Office Address	District or County	Date of Appointment	Salary per Annum	Remarks
Alexander, James A.	Fort Frances.	Part Rainy River District.	1921, May 26	.....	For salary see Crown Timber Agent.
Arthurs, E.	Esplanola Mills.	" District of Sudbury.	1915, June 1	500 00	
Blank, F.	Wilno.	" of Renfrew County and South Part Nipissing District.	1921, April 1	500 00	
Both, C.	Denbigh.	" of Frontenac, Lennox and Addington District of Cochrane.	1905, Oct. 20	300 00	
Bresnahan, John.	Hearst.	" " Rainy River.	1924, April 28	1,125 00	
Cameron, Wm.	Stratton Station.	" " Parry Sound.	1911, May 8	500 00	
Campbell, I. M.	Parry Sound.	" " Temiskaming.	1914, Nov. 15	600 00	
Clark, John.	Englehart.	" " Algonia.	1929, Mar. 14	800 00	
Dean, Thos.	Sault Ste. Marie.	" " Algonia.	1920, Nov. 18	300 00	Also Homestead Inspector: Died May 24th, 1929.
Dempsey, S. J.	Cochrane.	" " Cochrane.	1911, Feb. 1	1,100 00	
Ellis, H. J.	Powassan.	" " Parry Sound.	1909, May 20	500 00	
Fink, J. A.	Mattawa.	" " Nipissing.	1925, Mar. 18	500 00	
Fleming, A. W.	Minden.	" Haliburton.	1928, May 14	350 00	
Freeborn, J. S.	Magnetawan.	" District of Parry Sound.	1905, Nov. 10	500 00	
Freeland, A. W.	Emisdale.	" " Parry Sound.	1927, Nov. 1	500 00	
Fuller, David.	Bancroft.	" Hastings County.	1926, Mar. 20	500 00	
Gerhart, Wm. G.	Bracebridge.	Muskoka District.	1924, Oct. 14	.....	For salary see Homestead Inspectors.
Gibson, J. E.	Dryden.	Part District of Kenora.	1914, Dec. 5	1,300 00	
Grigg, Albert.	Bruce Mines.	" " Algonia.	1925, Sept. 1	1,000 00	Also Homestead Inspector.
Haies, W.	Apsley.	" County of Peterborough.	1911, July 17	250 00	
Hough, John A.	Matheson.	" District of Cochrane.	1926, April 20	1,300 00	
MacPhie, W. F.	North Bay.	" " Nipissing and Parry Sound.	1929, Oct. 1	1,050 00	
McCrea, J. R.	New Liskeard.	" " Temiskaming.	1924, Nov. 15	1,300 00	
MacLennan, J. K.	Sudbury.	" " Sudbury.	1905, July 3	700 00	
Marchildon, J. P.	Sturgeon Falls.	" " Nipissing and Part Sudbury.	1923, April 27	1 60	per day
Millicham, Thos.	Markstay.	" " Nipissing and Sudbury.	1928, Nov. 1	600 00	
Parsons, W. J.	North Bay.	" " Nipissing and Parry Sound.	1908, April 8	1,300 00	Died Sept. 11th, 1929.

Appendix No. 2—Continued

List of Agents for the year ending October 31st, 1929

Name	Post Office Address	District or County	Date of Appointment	Salary per Annum	Remarks
Smith, J. D. C.	Kenora	Part District of Kenora	1921, May 9	.....	For salary see Crown Timber Agents and Mining Recorders.
Sheppard, H. E.	Kapuskasung	" " Cochrane	1909, Feb. 13	.....	For salary see Homestead Inspectors.
Teasdale, R. A.	Massey	" " Sudbury	1917, July 1	600 00	
Trainor, W. J.	Hilton Beach	St. Joseph Island	1925, Sept. 12	300 00	
Watt, F.	Pembroke	Part Renfrew	1923, Sept. 11	300 00	
Wilson, A. N.	Kinmount	" County of Peterborough and Haliburton	1915, May 6	175 00	
Wilson, S. H.	Port Arthur	" District of Thunder Bay	1921, Nov. 26	1,300 00	
<i>Homestead Inspectors</i>					
Barnes, E. H.	Sault Ste. Marie	Part Algoma District	1929, June 20	1,050 00	
Barr, J. C.	Fort Frances	District of Rainy River	1906, Dec. 1	1,800 00	
Bastien, J. A.	Chelmsford	West Part of Sudbury District	1913, May 12	1,400 00	
Cragg, W. V.	New Liskeard	South Part of Temiskaming District	1913, April 1	1,900 00	
Dean, Thos.	Sault Ste. Marie	Part Algoma District	1908, Aug. 3	900 00	Also Crown Lands Agent. Died May 24th, 1929.
Gerhart, Wm. G.	Bracebridge	Muskoka District	1924, Oct. 14	1,200 00	Also Crown Lands Agent.
Grigg, Albert	Bruce Mines	Part District of Algoma	1925, Sept. 1	.....	For salary see Crown Lands Agents.
Hough, Wm.	Englehart	Centre Part of Temiskaming District	1926, Jan. 18	1,400 00	
Hughes, T.	Murillo	Thunder Bay District	1908, July 29	1,400 00	
Jervis, H. F.	Callander	District of Parry Sound	1920, June 10	1,800 00	
Owens, H. B.	Cache Bay	East part Sudbury and West part Nipissing Districts	1918, July 1	1,300 00	
Sheppard, H. E.	Kapuskasung	Part District of Cochrane	1909, Feb. 13	1,900 00	Also Crown Lands Agent.
Smith, D.	Cochrane	" Cochrane District	1912, April 24	1,900 00	
Van Horn, L. E.	Monteith	" "	1920, Jan. 27	1,900 00	
Wigle, R. G.	Dryden	Kenora District	1914, June 1	1,800 00	

		<i>Timber Agents</i>				
Alexander, Jas. A.	Fort Frances	Fort Frances District	1921, May 26	2,500 00	Also Crown Lands Agent and Mining Recorder.	
Fletcher, N. B.	Parry Sound	Part Parry Sound and Muskoka Districts.	1923, Dec. 1	1,800 00		
Huckson, A. H.	Sault Ste. Marie	" District of Algoma	1914, April 1	2,500 00		
Larose, S. C.	Ottawa	" Ottawa District	1890, May 8	1,800 00		
MacDonald, S. C.	New Liskeard	" Temiskaming District	1907, Jan. 1	2,500 00		
McDougall, J. T.	North Bay	Nipissing and part Sudbury Districts	1908, July 1	2,500 00		
Milway, Jos. H.	Port Arthur	Part Thunder Bay District	1910, Oct. 1	2,500 00		
Smith, J. D. C.	Kenora	Kenora District	1921, May 9	2,500 00	Also Acting Crown Lands Agent and Mining Recorder.	
Stevenson, A.	Peterborough	Bellefleur District	1905, Oct. 4	1,900 00		
Whelan, P. J.	Renfrew	Renfrew Agency	1908, Feb. 4	2,500 00		
Hart, J. I.	Orillia	Inspector of Crown Timber Agencies and Supervisor of Operations in connection with Timber Administration	1923, Sept. 5	4,400 00		
Hawkins, S. J.	Toronto	Relieving Crown Timber Agent	1905, Aug. 16	2,400 00		

Appendix No. 3

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year ending October 31st, 1929

Service	Acres Sold and Leased	Amount of Sales, and Leases	Collections on Sales, Leases, Land Taxes, etc.
<i>Lands Sold:</i>		\$ c.	\$ c.
Agricultural and Townsites.....	66,921.87	68,888 55	98,800 51
Clergy Lands.....			3,200 60
Common School Lands.....			3,650 88
University Lands.....	314.25	157 13	543 75
Grammar School Lands.....			945 17
<i>Lands Leased:</i>			
Crown.....	22,196.64	67,245 79	259,076 49
Temagami.....	96.78	954 00	4,069 67
Sand and Gravel.....			129 69
Provincial Land Tax.....			127,580 59
	89,529.54	137,245 47	497,997 35

Appendix No. 4

Statement of Revenue of the Department of Lands and Forests for the year ending
October 31st, 1929

Service	\$	c.	\$	c.	\$	c.
LANDS COLLECTIONS						
<i>Crown Lands:</i>						
Agricultural.....	84,939	14				
Townsites.....	13,861	37				
			98,800	51		
Clergy Lands.....	3,200	60				
Common School Lands.....	3,650	88				
University Grants.....	543	75				
Grammar School Lands.....	945	17				
			8,340	40		
					107,140	91
<i>Rent:</i>						
Crown Leases.....			243,645	74		
Algonquin Provincial Park.....			3,455	02		
Rondeau Provincial Park.....			9,462	15		
Bruce Beach.....			2,222	56		
Jordan Harbour.....			291	02		
Temagami Leases.....			4,069	67		
Sand and Gravel.....			129	69		
Provincial Land Tax.....			127,580	59		
					390,856	44
<i>Woods and Forests:</i>						
Bonus.....			1,993,566	05		
Timber Dues.....			1,861,308	73		
Ground Rent.....			109,609	84		
Fire Protection.....			353,258	07		
Transfer Fees.....			8,007	50		
Mill License Fees.....			594	80		
					4,326,344	99
<i>Parks:</i>						
Algonquin Provincial Park.....			8,963	78		
Rondeau Provincial Park.....			2,663	94		
Quetico Provincial Park.....			6,326	04		
					17,953	76
Casual Fees.....					2,687	95
REFUNDS						
Agents' Salaries.....			795	40		
Cullers' Act.....			268	00		
Contingencies.....			117	66		
Forest Ranging.....			101,414	02		
Forestry Act.....			3,032	35		
Fire Ranging.....			18,611	35		
Lac Seul Storage Dam.....			75,459	92		
Legal Fees and Expenses.....			35	00		
Insect Control.....			6	75		
Reforestation.....			15,013	70		
Unforeseen and Unprovided.....			140	00		
					214,894	15
					5,059,878	20

*Appendix No. 5*Statement of Revenue Refunds of the Department of Lands and Forests
for the year ending October 31st, 1929

Service	\$	c.
Algonquin Park—Rent.....		76 25
Algonquin Park.....		217 00
Bruce Beach—Rent.....		17 48
Casual Fees.....		15 50
Crown Lands Sales.....	1,300	25
Crown Rent.....	470	00
Forest Ranging—Scalers' Wages.....		27 00
Ground Rent.....		117 80
Jordon Harbour.....		19 00
Mill License Fees.....		5 00
Provincial Land Taxes.....		486 09
Rondeau Provincial Park—Rent.....		175 00
Temagami Leases—Rent.....		10 00
Timber Dues.....		6,922 20
		\$9,858 57

*Appendix No. 6*Statement of Receipts of the Department of Lands and Forests for the year ending
October 31st, 1929, which are considered as Special Funds

Service	\$	c.	\$	c.
<i>Clergy Lands:</i>				
Principal.....	1,487	38		
Interest.....	1,713	22		
			3,200	60
<i>Grammar School Lands:</i>				
Principal.....	515	75		
Interest.....	429	42		
			945	17
<i>Common School Lands:</i>				
Principal.....	1,891	14		
Interest.....	1,759	74		
			3,650	88
<i>University Lands:</i>				
Principal.....	349	78		
Interest.....	193	97		
			543	75
			\$8,340	40

Appendix No. 7

Statement of Disbursements of the Department of Lands and Forests for the year ending October 31st, 1929

Service	\$	c.
MAIN OFFICES AND BRANCHES:		
Salaries—Lands.....	151,432	23
Salaries—Forestry.....	35,800	00
AGENTS' SALARIES AND DISBURSEMENTS.....	101,469	07
ALGONQUIN PROVINCIAL PARK.....	39,628	82
ALLOWANCE TO SCHOOL SECTION, SOUTH WALSHINGHAM.....	150	00
ALLOWANCE TO SCHOOL SECTION, TOWNSHIP OF VESPRE.....	250	00
ALLOWANCE TO SCHOOL SECTION, TOWNSHIP OF CLARKE.....	150	00
ALLOWANCE TO SCHOOL SECTION, TOWNSHIP OF CHARLOTTEVILLE.....	150	00
BOARD OF SURVEYORS.....	200	00
CONTINGENCIES.....	65,905	59
CLEARING TOWNSITES AND REMOVING FIRE HAZARDS.....	74,322	23
CULLERS' ACT.....	292	45
DISPLAY AT TORONTO EXHIBITION.....	690	98
DISPLAYS AT EXHIBITIONS AND FALL FAIRS.....	914	44
EXTRA SERVICES.....	100	00
EXPENDITURES UNDER THE FORESTRY ACT.....	44,269	42
FIRE RANGING.....	1,677,671	39
FOREST RANGING.....	456,842	02
FOREST RESERVES.....	7,258	54
FOREST RESEARCH.....	8,068	38
FOREST INSECT CONTROL WORK.....	5,574	11
GRANT—CANADIAN FORESTRY ASSOCIATION.....	1,000	00
INSURANCE.....	7,023	53
LEGAL FEES AND EXPENSES.....	709	78
LAC SEUL STORAGE DAM.....	159,567	93
MOVING EXPENSES OF OFFICIALS.....	35	00
OTTAWA AGENCY.....	2,662	66
QUETICO PROVINCIAL PARK.....	19,988	46
RONDEAU PROVINCIAL PARK.....	18,804	13
REFORESTATION.....	385,469	77
SURVEYS.....	122,058	55
VETERANS' COMMUTATION.....	50	00
STATUTORY:		
Minister's Salary.....	8,000	00
Salaries not otherwise provided for.....	1,028	12
Refunds.....	1,527	48
SPECIAL WARRANTS:		
Long Point Provincial Road.....	6,400	38
Compensation to R. F. Baggett for improvements on Lot 14, Con. 4, Phelps.....	150	00
	3,405,615	46

Appendix

Statement of Timber and Amounts accrued from Timber Dues, Ground
QUANTITY AND

PROVINCE OF ONTARIO	Area covered by timber licenses	Saw Logs					
		Red and White Pine		Jack Pine		Other	
	Square Miles	Pieces	Feet	Pieces	Feet	Pieces	
		19,608	4,532,771	203,098,820	4,770,295	72,891,128	2,419,105	71,869,31

STATEMENT OF

PROVINCE OF ONTARIO	Posts	Telegraph Poles	Pulpwood	Railway Ties	Lagging		Stulls	Car Stakes
	Pieces	Pieces	Cords	Pieces	Pieces	Cords	Pieces	Pieces
	37,049	37,435	461,992	1,916,686	6,954	10	123	5,362

Total amount received from all Forest sources, \$4,333,389.99. See Appendix No. 9.

No. 8

Rent, Fire Protection and Bonus, etc., during the year ending 31st October, 1929

DESCRIPTION OF TIMBER

Boom and Dimension Timber						Piling		Cordwood		Tan-bark	Lath-wood	Box-wood
Red and White Pine		Jack Pine		Other		Lineal Feet	Board Measure	Hard	Soft			
Feet	Feet	Pieces	Feet	Pieces	Feet	Feet	Feet	Cords	Cords	Cords	Cords	Cords
30,644	4,643,676	26,903	2,272,461	22,250	2,159,746	141,607	40,271	8,987	60,969	946	416	5,681

TIMBER—Concluded.

Amounts Accrued

Timber Dues	Bonus	Trespass	Interest on Dues and Bonus	Ground Rent	Transfer Fees	Fire Tax	Mill License Fees	Annual Bonus	Total Accruals
\$ c. 1,640,057 69	\$ c. 2,039,249 54	\$ c. 26,562 46	\$ c. 42,463 63	\$ c. 112,465 00	\$ c. 8,007 50	\$ c. 363,126 37	\$ c. 599 80	\$ c. 7,220 00	\$ c. 4,239,751 99

Appendix No. 9

Statement of Timber Revenue, Year 1928-29

Timber Dues.....		\$1,868,230 93
Bonus.....		1,993,566 05
Fire Protection.....		353,258 07
Ground Rent.....		109,727 64
Transfer Fees.....		8,007 50
Mill License Fees.....		599 80
		<hr/>
		\$4,333,389 99
		<hr/>
Timber Dues.....	\$1,608,641 96	
Interest on Timber Dues.....	42,058 97	
Timber Sale Deposits.....	217,530 00	
	<hr/>	\$1,868,230 93
Bonus.....		1,993,566 05
Fire Protection.....		353,258 07
Ground Rent.....	108,825 74	
Interest on Ground Rent.....	901 90	
	<hr/>	109,727 64
Transfer Fees.....		8,007 50
Mill License Fees.....		599 80
		<hr/>
		\$4,333,389 99
Less Refund Account, Timber Dues.....	\$6,922 20	
“ “ “ Ground Rent.....	117 80	
“ “ “ Mill Fees.....	5 00	
	<hr/>	7,045 00
		<hr/>
		\$4,326,344 99
		<hr/>

Appendix No. 10

ACREAGE UNDER LICENSE

The area covered by timber licenses where the holder pays regulation ground rent and fire charges, at the end of the fiscal year 1929, was 19,608 square miles.

The number of Crown Timber Licenses issued for the license season of 1928-29 was 953.

Appendix No. 11

Timber areas disposed of from November 1st, 1928 to October 31st, 1929

Date Offered	Date Sold	Locality	Area sq. miles	No. of Tenders	To Whom Sold	Prices Paid			Proposition	File	
						Kind of Timber	Bid	Upset			Dues
1928 Oct. 16	1928 Nov. 5	Bond Township (Part), Part Lots 5 and 6, Con. 1, District of Cochrane.	1/2	1	Hawk Lake Lumber Co., Cochrane, Ont.	Spruce Pulpwood..... Balsam Pulpwood.....	\$0 60 40	\$1 40 70	Pulpwood	35051	
Oct. 19	Nov. 5	Berth A.T.W. 8A, District of Kenora.	3 1/2	1	G. E. Farlinger, Sioux Lookout	Jackpine.....	\$0 50	2 50	Logging	1423A	
Oct. 5	Nov. 5	Berth M-27, District of Kenora.	16	2	Indian Lake Lumber Co., Winnipeg, Man.	Jackpine..... Spruce.....	50 1 00	2 50 2 00	Logging	39599	
Oct. 6	Nov. 6	N. 2/3 Stedman Township and a block 6 miles square immediately north thereof, District of Thunder Bay.	60	5	Hacquoil Bros., Fort William	Jackpine..... Spruce..... Jackpine Ties.....	3 50 3 00 10 1/2	2 50 2 00 10	Mixed operation	77184	
Oct. 10	Nov. 8	W. 1/2 Tolstoi Twp., N.W. 1/2 Terry Township, District of Timiskaming.	27	1	Ontario Paper Co. Ltd., Thorold, Ont.	Jackpine..... Spruce Pulpwood..... Balsam Pulpwood.....	4 00 60 75	2 50 140 70	Pulpwood	80518
Oct. 10	Nov. 8	E. 1/2 Timmins Township, District of Timiskaming.....	18	1	Hawk Lake Lumber Co., Cochrane, Ont.	Jackpine..... Spruce Pulpwood..... Balsam Pulpwood.....	4 00 60 75	2 50 1 40 70	Pulpwood	55113
Oct. 10	Nov. 8	Blocks 5, 6, 7, N. and S. of C.P. Ry., Gull River Sect., District of Kenora.	49	6	Messrs. Greer Bros. Port Arthur	Jackpine.....	6 90	2 50	Logging	37584	

Appendix No. 11—Continued

Timber areas disposed of from November 1st, 1928 to October 31st, 1929

Date Offered	Date Sold	Locality	Area sq. miles	No. of Tenders	To Whom Sold	Prices Paid				Proposition	File
						Kind of Timber	Bid	Upset	Dues		
Oct. 8	Nov. 8	Area N. of G.T.P., Block 5, District of Thunder Bay.	56	8	Chas. W. Cox, Port Arthur, Ont.	Jackpine..... Spruce..... Spruce Pulpwood..... Balsam Pulpwood..... Jackpine Ties.....	\$6 00 4 50 25 20 10	\$4 00 4 00 60 50 10	\$2 50 2 00 1 40 70 10	Mixed	63116
Oct. 12	Nov. 13	N. 1/2 Adams Township, District of Timiskaming.	18	3	S. McChesney & Son, Ltd., Timmins, Ont.	White Pine..... Jackpine..... Large Spruce..... Spruce Pulpwood..... Balsam Pulpwood..... Yellow Birch..... White Birch..... Cedar Poles— 30 feet and less..... 31 to 40 feet..... 41 to 50 feet..... 51 feet and over.....	1 50 1 50 3 50 50 05 05 05 05 10 20 30 75 10	8 00 6 00 6 50 60 40 25 25 10 20 30 35	2 50 2 50 2 00 1 40 70 50 50 25 25 10 50 70 1 00	Mixed	28106
Oct. 24	Nov. 16	Part Haggart Township, Block 1, District of Cochrane.....	1 1/2	3	Beaverwood Fibre Co., North Bay	Spruce Pulpwood..... Balsam Pulpwood..... Poplar Pulpwood.....	55 55 15	85 1 55 10	1 40 70 40	Pulpwood	21145
Oct. 24	Nov. 16	Part Haggart Township, Block 2, District of Cochrane.	3 3/4	2	Beaverwood Fibre Co., North Bay	Spruce Pulpwood..... Poplar Pulpwood.....	30 15	85 10	1 40 40	Pulpwood	21145
Oct. 24	Nov. 16	Part Kendry Township, Block 3, District of Cochrane.	1	1	R. D. McKay, Cochrane	Spruce Pulpwood..... Balsam Pulpwood.....	\$0 05 05	1 10 1 80	1 40 70	Pulpwood	21145

Oct. 19	Nov. 19	Area North of McGregor Township, east of Onion Lake, District of Thunder Bay.	65	7	E. E. Johnson, Port Arthur	Jackpine..... Spruce..... Spruce Pulpwood..... Balsam Pulpwood..... Poplar Pulpwood..... Ties.....	1 50 2 00 75 1 55 4 25 04	6 50 6 00 60 40 10 10	2 50 2 00 1 40 70 40 10	Mixed	16064
Nov. 1	Nov. 26	Blyth Township, District of Nipissing.	36	1	Joseph Baechler, Waeging, Ont.	Hardwood..... Hemlock.....	..... .....	2 50 2 00	2 50 1 50	Logging	68807
Nov. 6	Nov. 28	Part Temple Township, District of Kenora.	¾	2	A. J. Gardiner, Eagle River	Spruce Pulpwood..... Jackpine Pulpwood..... Poplar Pulpwood..... Jackpine Ties.....	20 60 05	10 10 05	1 40 40 40 20	Mixed	11226
Nov. 3	Dec. 1	Berth J.A-21, District of Rainy River.	12	2	Shevlin-Clarke Co., Ltd., Minneapolis, Minn.	Red and White Pine..... Jackpine.....	63 63	6 50 3 00	2 50 2 50	Milling	64440
Nov. 7	Dec. 3	Part Fowler Township, District of Thunder Bay.	1	3	Bruce Morrison, Port Arthur.	Spruce..... Spruce Pulpwood..... Balsam Pulpwood..... Jackpine Ties.....	..... 56 56 07	5 50 60 1 30 10	2 00 1 40 70 10	Mixed	8616A
Nov. 3	Dec. 3	Area North of G.T.P., Block 4, District of Thunder Bay.	18	5	Abitibi Power & Paper Co., Ltd., Toronto.	Spruce Pulpwood.....	65	70	1 40	Pulpwood	59107
Nov. 13	Dec. 4	Berth J.A-22, District of Rainy River.	4½	2	J. A. Mathieu, Ltd., Rainy Lake	Red and White Pine..... Jackpine..... Jackpine Pulpwood.....	3 50 3 50 35	4 50 3 50 10	2 50 2 50 40	Logging	6138
Nov. 21	Dec. 14	Part Kendry Township, District of Cochrane.	11½	4	Wm. Kitts, Cochrane.	Spruce Pulpwood..... Poplar Pulpwood.....	45 01	1 15 10	1 40 40	Pulpwood	21145
Dec. 7	Dec. 21	Part Lundy Township, District of Timiskaming.	¾	1	John Aitchison, New Liskeard	White Pine..... Jackpine..... Spruce.....	3 00 3 00 3 00	3 50 2 50 3 00	2 50 2 50 2 00	Logging	16080

Appendix No. 11—Continued
Timber areas disposed of from November 1st, 1928 to October 31st, 1929

Date Offered	Date Sold	Locality	Area sq. miles	No. of Tenders	To Whom Sold	Prices Paid				Proposition	File
						Kind of Timber	Bid	Upset	Dues		
1928 Dec. 15	1928 Dec. 28	Part Miscampbell Township, District of Rainy River.	1/4	1	Jean Bugold, Fort Frances	Tamarac Fuelwood.....	.....	45	25	Fuelwood	60347
1929 Dec. 15	1929 Jan. 4	Part Comnee Township, Dis- trict of Thunder Bay.....	1/4	1	Nestor Pary, Mokomon	Spruce Pulpwood..... Balsam Pulpwood..... Ties.....	..... ..... .....	75 1 45 12	40 70 10	Mixed	33966
1929 Jan. 2	1929 Jan. 10	Zealand Township Part, Dis- trict of Kenora.	1/2	1	Dryden Paper Co., Ltd., Dryden, Ont.	Jackpine Pulpwood.....	.....	10	40	Clean up	23841
1928 Dec. 28	1928 Jan. 21	N.E. 1/4 Adrian Township, District of Thunder Bay.	9	5	Ernest Parker, Port Arthur	Jackpine..... Spruce Pulpwood..... Balsam Pulpwood..... Poplar Pulpwood..... Jackpine Ties.....	..... ..... ..... ..... .....	7 00 75 1 00 2 30 13	50 40 70 40 10	Mixed	80856
1929 Jan. 2	1929 Jan. 23	Area N. of Mud Lake, vicini- ty of Kabigon Sta., District of Thunder Bay.	4	6	J. E. Silverson, Fort William	White Pine..... Jackpine..... Spruce..... Jackpine Ties.....	..... ..... ..... .....	9 00 8 00 6 50 13	50 50 2 00 10	Logging	80701

Jan. 8	Jan. 28	Part Hartman Township, District of Kenora.	1/4	1	Swan Swanson, Diunovic	Jackpine Pulpwood..... Ties.....	..... .....	10 05	40 10	Mixed	28203
Jan. 11	Feb. 1	Part Eby Township, District of Timiskaming.	1/4	1	Hill-Clark-Frances, Ltd. New Liskeard	White Pine..... Jackpine..... Spruce..... Cedar.....	..... ..... ..... .....	7 50 4 50 5 50 3 50	2 50 2 50 2 00 1 50	Logging	14756
Feb. 7	Feb. 18	Auld Township Part, District of Timiskaming.	1/4	1	Thos. Martindale, Cane P.O.	Spruce Pulpwood.....	.....	10 40	1 40	Pulpwood	20416
Feb. 9	Feb. 19	Marter Township Part, District of Timiskaming.	1/4	1	J. A. Amm, New Liskeard	Spruce Pulpwood.....	.....	25 60	1 40	Pulpwood	60136
Feb. 11	Feb. 21	Auld Township Part, District of Timiskaming.	1/4	3	Joseph Kirkey, Cane P.O.	Green Jackpine..... Fire Killed Jackpine..... Cedar..... Spruce Pulpwood.....	..... ..... ..... 35	4 50 50 1 50 50	2 50 2 50 1 50 1 40	Logging	20416
Feb. 11	Feb. 21	Auld Township Part, District of Timiskaming.	1/4	1	Joseph Kirkey, Cane P.O.	Red and White Pine..... Green Jackpine..... Spruce Pulpwood.....	..... ..... .....	7 00 4 00 35	2 50 2 50 1 40	Logging	20416
Feb. 18	Mar. 11	Parcels 2, 3, 4, 5, Vicinity of Gull Lake, District of Kenora.	16	2	Masabha Development Co., Ltd., Port Arthur	Parcels 2, 3, 4, Red and White Pine..... Jackpine..... Spruce..... Parcel 5. Jackpine..... Spruce.....	..... ..... ..... ..... ..... .....	25 10 25 25 8 00 25 8 50 25 9 00 25 9 50	2 50 2 50 2 00 2 50 2 00	Mixed	37584

Appendix No. 11—Continued
Timber areas disposed of from November 1st, 1928 to October 31st, 1929

Date Offered	Date Sold	Locality	Area of sq. miles	No. of Tenders	To Whom Sold	Prices Paid				Proposition	File
						Kind of Timber	Bid	Upset	Dues		
1929 Mar. 18	Apr. 15	Area north of Quetico Station, District of Thunder Bay.	8¾	4	George Johnson, Port Arthur	Red and White Pine.....	2 50	12 00	2 50	Logging	200A
						Jackpine.....	2 50	9 25	2 50		
May 29	June 24	Kenogaming Township, District of Sudbury.	69½	1	Acme Timber Co., Ltd., Sudbury, Ont.	Red and White Pine.....	6 00	6 00	2 50	Logging	62911
						Jackpine.....	4 00	4 00	2 50		
						Spruce.....	5 00	5 00	2 00		
June 12	July 12	Calder Township Part, District of Cochrane.	6	1	D. A. Chenier, Cochrane, Ont.	Spruce Pulpwood.....	35	35	1 40	Pulpwood	28664
						Balsam Pulpwood.....	1 05	70	70		
						Poplar Pulpwood.....	10	10	40		
July 25	Aug. 15	Marven Township North Part District of Cochrane.	21	1	Hawk Lake Lumber Co., Ltd., Cochrane, Ont.	Spruce } Balsam } Spruce Pulpwood..... Balsam Pulpwood..... Poplar.....	4 50 1 00 80 10	4 50 1 00 70 10	2 00 1 40 70 40	Mixed	53229
Aug. 7	Aug. 26	Blount Township Part, District of Cochrane.	¼	3	Wm. E. King, Blount, Ont.	Green Pulpwood.....	12	1 00	1 40	Pulpwood	42060
						Dry Fuelwood.....	70	10	25		
May 1	Aug. 26	Pulpwood area, District of Sudbury.	975	1	Howard Smith Paper Mills, Ltd., Montreal, Que.	Spruce Pulpwood.....	10	65	1 40	Pulpwood	69592
						Balsam Pulpwood.....	10	1 35	70		
						Poplar or Whitewood } Pulpwood } ..	10	20	40		

Aug. 6	Sept. 3	Parts Townships McCart and Newmarket, District of Cochrane.	1/2	2	L. Silver, Timmins	Spruce Pulpwood.....	15	1 00	1 40	Pulpwood	74538
Aug. 8	Sept. 4	An area N. and W. of Berths W-1 and 2, District of Thunder Bay.	9 1/2	3	John J. Kelly, Port Arthur	Spruce Pulpwood..... Jackpine Ties.....	50 07	35 05	1 40 10	Mixed	13778
Aug. 15	Sept. 5	Frateigh Township Part, District of Thunder Bay.	1/2	2	John Oja Nolalu	Spruce..... Spruce Pulpwood..... Balsam Pulpwood.....	1 00 25 60	6 00 60 70	2 00 1 40 70	Pulpwood	26210
Aug. 8	Sept. 12	Berth J.A.-23, District of Rainy River.	10 1/4	1	J. A. Mathieu, Ltd., Rainy Lake	Red and White Pine..... Jackpine..... Spruce..... Jackpine Pulpwood.....	25 25 25	7 00 3 50 5 00 15	2 50 2 50 2 00 40	Logging	39847
Aug. 8	Sept. 12	Parcels 2, 3, Berth J.A.-24, District of Rainy River.	7 1/4	1	J. A. Mathieu, Ltd., Rainy Lake	Red and White Pine..... Jackpine..... Spruce..... Spruce Pulpwood..... Jackpine.....	25 25 25	7 00 3 50 4 50 20 10	2 50 2 50 2 00 1 40 40	Logging	797
Aug. 8	Sept. 12	Parcel 7, Berth J.A.-17, District of Rainy River.	9 1/2	1	J. A. Mathieu, Ltd., Rainy Lake	Red and White Pine..... Jackpine..... Jackpine Pulpwood.....	25	5 00 2 00 10	2 50 2 50 40	Logging	59722
Aug. 16	Sept. 19	Hook Township Part, District of Algoma.	20	1	Messrs. Lanthier & Hall, Hearst	Green J Pine Ties..... Dry or Burned Jackpine Ties.....		08	10 10	Ties	76931

Appendix No. 11—Continued

Timber areas disposed of from November 1st, 1928 to October 31st, 1929

Date Offered	Date Sold	Locality	Area sq. miles	No. of Tenders	To Whom Sold	Prices Paid				Proposition	File
						Kind of Timber	Bid	Upset	Dues		
1929 Aug. 9	Sept. 20	Bartlett Township, District of Timiskaming.	36	2	Hawk Lake Lumber Co., Cochrane	Red and White Pine..... Jackpine..... Spruce.....	..... ..... 25	8 50 5 00 5 50	2 50 2 50 2 00	Logging	48802
Aug. 9	Sept. 20	English Township, District of Sudbury.	36	2	Hawk Lake Lumber Co., Cochrane	White Pine..... Jackpine..... Spruce.....	50	8 00 4 50 4 50	2 50 2 50 2 00	Logging	48802
Aug. 9	Sept. 20	Nursey Township, District of Sudbury.	36	2	Hawk Lake Lumber Co., Cochrane	Red and White Pine..... Jackpine..... Spruce.....	50 25	7 50 4 00 4 00	2 50 2 50 2 00	Logging	48802
Aug. 12	Sept. 30	Parts Township 196, District of Algoma.	14	1	Carpenter Hixon Co., Ltd.	Red and White Pine..... Spruce.....	08 08	5 00 4 00	2 50 2 00	Logging	63937
Aug. 12	Sept. 30	N.E. 1/4 Township 9 B, N.W. 1/4 Township 10A, E. 1/2 Township 10B, S.W. 1/4, Township 20, District of Sudbury.	45	1	McNaught Lumber Co., Chapleau	White Pine..... Jackpine..... Spruce..... Spruce Pulpwood.....	15 10 15	6 50 4 15 5 00 60	2 50 2 50 2 00 1 40	Mixed	63681
Sept. 14	Oct. 5	Part Sterling Township, District of Thunder Bay.	1/4	2	Thos Brunner, Hurkett	Spruce Pulpwood..... Jackpine.....	35 05	95 15	1 40 40	Mixed	34146

Sept. 6	Oct. 7	North Part Berth S-16, District of Kenora.	7½	1	Indian Lake Lumber Co., Winnipeg	Red Pine..... Jackpine..... Spruce..... Spruce Pulp..... Jackpine Pulp.....	50 3 00 3 50 20 10	7 00 4 50 4 50 40 10	2 50 2 50 2 00 1 40 40	Mixed	80677
Sept. 19	Oct. 11	Part N. Burleigh Township, County of Peterboro.	¼	2	Peterboro Lumber Co., Peterboro	Pine..... Hemlock.....	8 10 3 10	5 50 2 50	2 50 1 50	Logging	28733

Appendix No. 12

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued in Free Grant Townships during the year ending 31st October, 1929

Township	District or County	Agent	No. of persons located	No. of acres located	No. of purchasers	No. of acres sold	No. of persons cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Chapman	Parry Sound	J. S. Freeborn,			1	10			1	210
Croft	"	Magnetawan..	2	200			4	350	1	91
Gurd	"	"					2	167		
Lount	"	"	1	100			1	100	2	300
Machar	"	"	1	100					3	562
Mills	"	"			1	30				
Pringle	"	"	1	100						
Ryerson	"	"	1	200					1	200
Spence	"	"	1	100			1	100		
Strong	"	"	2	200			2	200	1	100
Barmour	"	A. W. Freeland,	1	100			1	100	2	191
Bethune	"	Emsdale.....					2	280	2	255
Joly	"	"					3	324	1	100
McMurrich	"	"							1	200
Hardy	"	H. J. Ellis,							1	90
Himsworth	"	Powassan.....	4	401			3	301	2	400
Laurier	"	"			2	113 $\frac{13}{25}$	2	200	3	501 $\frac{1}{2}$
Nipissing	"	"	1	114	2	24	7	619	1	106
Patterson	"	"	1	100	1	3				
Bonfield	Nipissing...	W. F. MacPhie,	1	100			3	310		
Boulter	"	North Bay....	4	400			2	203		
Chisholm	"	"	3	300			6	844	1	206
Ferris	"	"	1	96.93			2	196.93	3	368.93
Anson	Haliburton	A. W. Fleming,							1	100
Glamorgan	"	Minden.....	3	292			3	292	1	189
Lutterworth	"	"							2	134
Snowdon	"	"	1	100			1	100		
Stanhope	"	"					3	302		
Anstruther	Peterboro'..	Wm. Hales,							1	200
Burleigh N.D.	"	Apsley.....							1	201
Chandos	"	"	1	100						
Methuen	"	"					1	100	1	170
Cavendish	Haliburton	A. N. Wilson,	1	108			1	108		
Galway	"	Kinmount.....							1	20
Brunel	Muskoka...	W. G. Gerhart,	1	99			2	180		
Franklin	"	Bracebridge..					3	299		
Muskoka	"	"					1	10		
Oakley	"	"	1	98			1	98		
Ridout	"	"	1	100	1	6 $\frac{4}{5}$				
Wood	"	"					2	296		
Burpee	Parry Sound	Miss I. M. Camp-					3	302		
Carling	"	bell, Parry Sound			1	99				
Christie	"	"					6	720		
Conger	"	"			1	21.73			1	199.98
Ferguson	"	"	2	172			1	196		
Foley	"	"					1	100		
Hagerman	"	"	1	113			1	113	1	39
Henvey	"	"	1	200			2	195		
Humphrey	"	"							2	236
McConkey	"	"					1	97	1	100
McDougall	"	"					3	253	1	100
McKellar	"	"							1	100
McKenzie	"	"					2	204		
Monteith	"	"					15	1,937	1	160
Wilson	"	"			1	37			3	407

Appendix No. 12—Continued

Township	District or County	Agent	No. of persons located	No. of acres located	No. of purchasers	No. of acres sold	No. of persons cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Pearson	Thunder Bay	S. H. Wilson	6	953	5	161	2	240 $\frac{1}{2}$		
Scoble	"	"	5	692			3	457		
Stirling	"	"	12	1,715.65			12	1,778	8	1,250 $\frac{3}{4}$
Strange	"	"	2	268 $\frac{1}{2}$			1	158 $\frac{1}{2}$		
Ware	"	"	14	2,085	1	2	5	720 $\frac{1}{2}$		
Blue	Rainy River	Wm. Cameron,	2	320			2	320	2	318
Curran	"	Stratton					1	162		
Dewart	"	"	9	1,120 $\frac{1}{4}$	1	36 $\frac{1}{2}$	7	1,042 $\frac{1}{2}$	1	77 $\frac{1}{2}$
Mather	"	"	1	161			1	161		
Morley	"	"	1	164	1	4	2	123	2	244
Morson	"	"	6	549	1	2 $\frac{3}{4}$	9	1,102 $\frac{1}{4}$	1	187
McCrosson	"	"	4	319 $\frac{1}{2}$	2	90 $\frac{3}{4}$	4	400	3	469 $\frac{3}{4}$
Nelles	"	"	6	565	2	82	8	1,050		
Potts	"	"	4	559			4	560 $\frac{1}{2}$	1	159 $\frac{1}{2}$
Pratt	"	"	5	649			3	418	1	181
Richardson	"	"	4	598 $\frac{1}{2}$			1	159 $\frac{1}{2}$	1	160
Spohn	"	"	33	3,504 $\frac{1}{4}$	1	77 $\frac{1}{2}$	24	2,947 $\frac{1}{2}$	1	158
Sifton	"	"	7	662 $\frac{3}{4}$	2	58	11	1,248 $\frac{3}{4}$	1	175 $\frac{1}{2}$
Sutherland	"	"	2	240 $\frac{1}{4}$	1	80	6	721 $\frac{1}{4}$	3	394 $\frac{3}{4}$
Tait	"	"	1	80			4	486		
Tovell	"	"	2	338	2	1 $\frac{1}{2}$	7	879 $\frac{3}{4}$	2	198 $\frac{3}{8}$
Burriss	"	J. A. Alexander,			1	15 $\frac{1}{2}$				
Carpenter	"	Fort Frances							3	330 $\frac{1}{4}$
Crozier	"	"	1	81			2	322	2	164
Dance	"	"	4	635	1	38 $\frac{1}{2}$	10	1,408 $\frac{1}{2}$		
Devlin	"	"	1	164						
Fleming	"	"	1	154						
Kingsford	"	"	2	369 $\frac{1}{2}$	3	4	7	1,162		
Lash	"	"					1	160	1	160
Roddick	"	"					1	80		
Woodyatt	"	"	1	36			1	36		
Aubrey	Kenora	J. E. Gibson,	6	561 $\frac{3}{4}$	2	13	7	60 $\frac{1}{2}$	4	600.83
Britton	"	Dryden	6	879 $\frac{1}{2}$	1	1	7	1,120 $\frac{1}{2}$	2	320
Eton	"	"	2	319	3	102 $\frac{3}{4}$	3	479	8	1,908
Langton	"	"	4	491			2	146		
Melgund	"	"	8	1,044 $\frac{3}{4}$	4	61	11	1,704 $\frac{1}{2}$		
Mutrie	"	"	4	430	4	34 $\frac{1}{2}$	4	621	6	926 $\frac{1}{2}$
Rowell	"	"	4	639			4	558	4	617.24
Redvers	"	"	2	281 $\frac{1}{2}$						
Rugby	"	"	1	160			2	240 $\frac{1}{2}$		
Sanford	"	"	4	478 $\frac{1}{2}$	2	139 $\frac{1}{2}$	2	354	1	79 $\frac{1}{2}$
Southworth	"	"	11	1,728 $\frac{3}{8}$	5	86 $\frac{1}{4}$	10	1,565	2	360
Temple	"	"	5	814			7	933 $\frac{1}{2}$		
Van Horne	"	"			1	22 $\frac{7}{8}$			3	417
Wabigoon	"	"	9	1,293 $\frac{3}{4}$	2	5 $\frac{1}{2}$	13	1,767 $\frac{3}{4}$		
Wainwright	"	"	1	80	1	160	3	479 $\frac{1}{2}$		
Zealand	"	"	9	991 $\frac{17}{25}$	3	102 $\frac{1}{5}$	9	1,195.63	3	347
Melick	"	J. D. C. Smith,	9	1,300	1	126 $\frac{7}{25}$	11	1,579	2	226 $\frac{1}{4}$
Pellatt	"	Kenora	5	500 $\frac{1}{2}$	1	112	4	337	5	804 $\frac{1}{2}$
Bleazard	Sudbury	J. K. MacLennan,					5	653	2	320 $\frac{1}{2}$
Broder	"	Sudbury	1	149	1	11	2	228 $\frac{1}{2}$	6	758 $\frac{1}{2}$
Capreol	"	"	1	159			2	204	2	159 $\frac{1}{4}$
Chapleau	"	"			1	155			1	107
Dill	"	"			1	160	6	925	3	480
Garson	"	"	1	160			12	1,704.7	1	160
Hanmer	"	"			1	85			1	165
Lumsden	"	"	3	320 $\frac{1}{2}$			2	240 $\frac{1}{4}$	2	240 $\frac{1}{4}$
Morgan	"	"							1	163 $\frac{1}{2}$

Appendix No. 12—Continued

Township	District or County	Agent	No. of persons located	No. of acres located	No. of purchasers	No. of acres sold	No. of persons cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Appleby	Sudbury	T. A. Millichamp,	7	1,044	..	.....	2	322	1	125
Casimir	"	Markstay	3	446	..	.....	3	446	..	.....
Hagar	"	"	12	1,758	2	110	11	1,637.87	6	1,021
Jennings	"	"	1	160 $\frac{1}{2}$	..	.....	..	.....	..	.....
Kirkpatrick	"	"	1	160	1	192.83	1	160	3	494
Ratter	"	"	2	373	..	.....	5	585	..	.....
Caldwell	"	J. P. Marchildon,	..	.....	1	1	2	320	1	160
Cosby	"	Sturgeon Falls.	1	162	1	2	1	162	..	.....
Grant	"	"	4	635	..	.....	2	320	1	159 $\frac{1}{2}$
Macpherson . . . . .	"	"	..	.....	..	.....	..	.....	1	131 $\frac{1}{2}$
Martland	"	"	1	161	2	3	..	.....	..	.....
Springer	"	"	2	248.2	1	2	2	248.2	..	.....
Abinger	Lennox and Addington	Chas. Both, Denbigh	1	96	..	.....	..	.....	..	.....
Miller	Frontenac . . . . .	"	..	.....	1	84	..	.....	1	84
Shawanaga	Parry Sound	Unattached . . . . .	..	.....	..	.....	1	147	..	.....
Sabine	Nipissing	"	1	100	..	.....	2	290	1	88.19
Total			456	56,577.22	99	3,725.86	505	61,506.46	220	30,185.49

Number of lots assigned, 140.

Number of acres assigned, 17,492 $\frac{1}{2}$.

Appendix No. 13

Statement showing the number of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued in Townships other than Free Grant during the year ending 31st October, 1929.

Township	District or County	Agent	No. of purchasers	No. of acres sold	No. of lots cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Blount	Cochrane	S. J. Dempsey,	13	955.70	24	1,975		
Brower	"	Cochrane	4	378	5	611	3	460
Calder	"	"	21	1,615	83	7,525	2	296
Clute	"	"	2	145½	18	2,198	5	743
Colquhoun	"	"	4	324	21	1,647		
Fox	"	"	6	556½	12	1,442	4	614
Fournier	"	"	3	322½	10	1,005		
Fauquier	"	"	3	225	5	517	4	652
Glackmeyer	"	"	1	75	6	748	4	609
Kennedy	"	"	1	75	7	975	1	149
Leitch	"	"	13	1,050	54	4,459		
Lamarche	"	"	4	322½	9	1,106	2	304
Machin	"	"	6	483	9	899		
Newmarket	"	"	2	163	9	1,038		
Pyne	"	"	8	641½	19	743		
Shackleton	"	"	3	241½	8	1,052		
Haggart	"	"	29	4,082½				
Kendry	"	"	4	374.21			7	838
Barker	"	John Bresnahan,	7	600	8	600		
Casgrain	"	Hearst	11	818½	2	190	9	1,332
Devitt	"	"	29	2,289	36	2,694	2	294
Eilber	"	"	22	1,712	10	750		
Hanlan	"	"	22	1,654	9	944	6	923
Kendall	"	"	13	971	11	1,048	5	742
Lowther	"	"	22	1,714	14	1,321	5	577
McGowan	"	"	10	748				
O'Brien	"	H. E. Sheppard,	22	2,033	10	955	8	2,008
Nansen	"	Kapuskasung	3	222			1	151
McCrea	"	"	48	3,868½	46	3,741		
Owens	"	"	8	778	11	1,037	5	535
Iddington	"	"	34	3,176	47	4,504	2	200
Williamson	"	"	6	568	10	956	5	473
Blain	Timiskaming	John Clark,	3	236½	3	216		
Catharine	"	Englehart			3	399		
Chamberlain	"	"	3	240½			5	676
Dack	"	"			1	80	1	121
Eby	"	"	7	639½	1	80	5	200
Evanturel	"	"			1	158	2	319
Ingram	"	"	1	80½	1	80	2	309
Marter	"	"	4	320½	4	480	5	615
Marquis	"	"	1	73½	8	866		
Otto	"	"	29	2,358	4	308	1	146
Pacaud	"	"	4	316	4	478	7	1,111
Pense	"	"	4	320	1	79		
Robillard	"	"	1	81½	4	482	3	424
Savard	"	"			1	160	2	319
Sharpe	"	"			1	158		
Benoit	"	J. A. Hough,	6	460½	7	701	7	992
Beatty	Cochrane	Matheson			1	156	5	424
Bond	"	"			7	1,042		
Bowman	"	"	1	76				
Calvert	"	"			2	318	2	321
Carr	"	"					4	568
Clergue	"	"			2	321		
Currie	"	"	4	314½	32	4,167	3	415

Appendix No. 13—Continued

Township	District or County	Agent	No. of purchasers	No. of acres sold	No. of lots cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Dundonald	Cochrane	J. A. Hough,	1	78 ³ / ₄	1	165	4	513
Evelyn	"	Matheson			1	160	1	148
German	"	"	2	153	5	481		
Hislop	"	"			1	160	2	234
Matheson	"	"	5	397	7	862	3	251
Mountjoy	"	"	3	229	3	387	3	451
McCart	"	"	3	190	10	1,183		
Playfair	"	"					2	318
Stock	"	"			9	1,297	2	238
Taylor	"	"			5	615	4	535
Walker	"	"			13	1,957	6	961
Auld	Timiskaming	J. R. McCrea,			4	596		
Beauchamp	"	New Liskeard	1	79 ³ / ₄	3	467	3	483
Bucke	"	"					2	200
Brethour	"	"	1	79			2	301
Cane	"	"	1	40	4	400	1	160
Dymond	"	"	1	1 ¹ / ₁₀			1	319
Firstbrook	"	"			7	1,055	1	134
Harley	"	"	1	80				
Henwood	"	"	1	79 ¹ / ₄	1	162	3	477
Hilliard	"	"	2	159	3	477	2	241
Hudson	"	"			2	305	1	160
Lundy	"	"					1	80
Tudhope	"	"			1	71	2	169
Lorrain	"	N. J. McAulay,			1	98		
		Haileybury						
Hugel	Nipissing	T. A. Millichamp			1	80	1	160
Henry	"	Markstay	1	186	1	160		
Loughrin	"	"	12	1,936 ¹ / ₂	4	637	3	323
Loudon	"	"			1	164		
Phelps	"	W. F. MacPhie,	5	631	7	1,121	5	640
Widdifield	"	North Bay	1	160	5	800	5	608
Hallam	Sudbury	R. A. Teasdale,			1	160		
Harrow	"	Massey					1	159
May	"	"					1	327
Salter	"	"	1	161	2	269	2	213
Bigwood	"	J. K. MacLennan	2	268			7	871
Delamere	"	Sudbury	3	391 ¹ / ₂				
Dowling	"	"			2	344	3	233
Bright	Algoma	Albert Grigg,			1	315		
Bright, Add.	"	Bruce Mines	1	60	1	220		
Day	"	"					1	134
Deroche	"	"	1	137 ¹ / ₂			1	137
Gladstone	"	"			2	167	1	143
Gould	"	"	1	164				
Kirkwood	"	"	1	75	6	716	1	75
Tarbutt	"	"			1	159		
Thompson	"	"	2	319	3	480		
Wells	"	"			7	1,272		
Vankoughnet	"	E. H. Barnes,					1	165
Parkinson	"	Sault Ste. Marie					1	162
Devon	Thunder Bay	S. H. Wilson,						
		Port Arthur	25	3,628	1	160		
Forbes	"	"	13	2,015 ¹ / ₂	27	4,327		
Fowler	"	"	2	311 ¹ / ₂	7	1,163		
Goldie	"	"	4	609	4	627		
Jacques	"	"	18	2,603 ³ / ₄	5	707		
Lyon	"	"			1	79	2	314
McTavish	"	"	4	616	2	310		

Appendix No. 13—Continued

Township	District or County	Agent	No. of purchasers	No. of acres sold	No. of acres cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Nakina.....	Thunder Bay.....	S. H. Wilson,	1	15.7				
Nipigon.....	".....	Port Arthur..	2	315	1	160		
Sibley.....	".....	".....	14	1,998	2	312		
Upsala.....	".....	".....	9	1,366 $\frac{1}{2}$	4	574	4	579
Drayton.....	Kenora.....	J. D. C. Smith,						
		Kenora.....	2	29.82			1	108
Mason.....	Sudbury.....	J. P. Marchildon,			1	60		
Scollard.....	Nipissing.....	Sturgeon Falls					1	162
Nairn.....	Sudbury.....	Ed. Arthurs.						
		Espanola.....	1	157 $\frac{1}{2}$			1	145
Arran.....	Bruce.....	Unattached..					1	100
Admaston.....	Renfrew.....	".....	1	100	1	100	1	100
Amaranth.....	Dufferin.....	".....			1	100		
Alfred.....	Prescott.....	".....			1	100		
Badgerow.....	Nipissing.....	".....	3	398			1	157
Bagot.....	Renfrew.....	".....			6	735		
Barton.....	Wentworth.....	".....	2	59.79				
Bedford.....	Renfrew.....	".....			3	375	1	30
Bruce.....	Bruce.....	".....					1	50
Barrie.....	Frontenac.....	".....					1	80
Brant.....	Bruce.....	".....					2	201
Bentinck.....	Grey.....	".....					1	50
Burgess (North).....	Lanark.....	".....					1	57
Cleland.....	Sudbury.....	".....	1	155 $\frac{1}{2}$			1	149
Clark.....	Durham.....	".....					1	8
Darling.....	Lanark.....	".....			3	281		
Dalhousie.....	Lanark.....	".....					2	200
Dummer.....	Peterborough.....	".....					1	50
Denison.....	Sudbury.....	".....					1	86
Drury.....	".....	".....	1	164	2	321	5	812
Dryden.....	".....	".....			1	161	1	40
Elzevir.....	Hastings.....	".....			2	247		
Egremont.....	Grey.....	".....					2	150
Edwardsburg.....	Grenville.....	".....					1	100
Falconer.....	Nipissing.....	".....	4	550 $\frac{1}{2}$				
Field.....	".....	".....		92 $\frac{2}{3}$			3	325
Fairbank.....	Sudbury.....	".....					1	119
Foster.....	".....	".....					1	159
Fenelon.....	Victoria.....	".....			1	200		
Gainsboro.....	Lincoln.....	".....	1	33.50			1	34
Glenelg.....	Grey.....	".....			1	99	3	205
Hallowell.....	Prince Edward.....	".....	1	58 $\frac{1}{2}$			1	59
Hinchinbrooke.....	Frontenac.....	".....	1	100				
Hungerford.....	Hastings.....	".....			1	173		
Harvey.....	Peterborough.....	".....					4	565
Houghton.....	Norfolk.....	".....					2	100
Kaladar.....	Lennox and Addington.....	".....	2	327 $\frac{1}{2}$	3	229	2	173
Kincardine.....	Bruce.....	".....					2	102
Kennebec.....	Frontenac.....	".....					4	548
Lake.....	Hastings.....	".....	2	206 $\frac{1}{2}$	1	100	3	507
Lavant.....	Lanark.....	".....	1	100			1	100
Lorne.....	Sudbury.....	".....	1	160			1	160
Louise.....	".....	".....	2	242			3	410
Laxton.....	Victoria.....	".....					1	100
Lansdowne.....	Leeds.....	".....	1	30.16			1	100
London.....	Middlesex.....	".....					1	62

Appendix No. 13—Continued

Township	District or County	Agent	No. of purchasers	No. of acres sold	No. of lots cancelled	No. of acres resumed	No. of patents issued	No. of acres patented
Matchedash	Simcoe	Unattached	2	176.30			2	192
Marne	Algoma	"	1	146.20				
Madoc	Hastings	"			1	100		
Marlborough	Carleton	"			4	398	1	100
MacLennan	Sudbury	"	1	216			1	216
Murray	Northumberland	"					2	136
McKim	Sudbury	"	1	160	1	128	1	63
Orillia, North	Simcoe	"			2	400		
Oso	Frontenac	"			1	217	4	511
Olden	"	"					1	80
Proton	Grey	"					2	198
Ross	Renfrew	"	1	116.21				239
Roxborough	Stormont	"	7	407.02			1	200
Ramsay	Lanark	"					1	108
Seymour	Northumberland	"	2	25 ³ / ₈	1	69		
Snider	Sudbury	"	2	291.75			1	35
Sheffield	Lennox and Addington	"			4	285	1	200
Sommerville	Victoria	"			1	100	3	403
Sydenham	Grey	"					1	100
Sherbrooke North	Lanark	"					1	98
Sandwich East	Essex	"	1	66.11				
Sandwich West	"	"	1	9.43				
Smythe	Timiskaming	"			1	161		
Tiny	Simcoe	"					1	69
Thorah	Ontario	"					1	8
Umbach	Kenora	"			1	130		
Victoria	Algoma	"					1	154
Vespra	Simcoe	"			1	200		
Wolford	Grenville	"					1	100
Waters	Sudbury	"	1	160			3	470
Westmeath	Renfrew	"					1	32
		Total	645	62973.68	834	91,163	318	41,035

Number of lots assigned, 317.

Number of acres assigned, 40,370.

Appendix No. 13—Continued

Locations by returned soldiers and cancellations for non-performance of settlement duties.

District	Agency	Locations	Cancellations
Cochrane.....	Cochrane.....	9	18
Cochrane.....	Matheson.....	7	16
Cochrane.....	Kapuskasing.....	5	2
Cochrane.....	Hearst.....	1	7
Algoma.....	Bruce Mines.....	2	2
Algoma.....	Sault Ste. Marie.....	..	2
Temiskaming.....	Englehart.....	4	3
Temiskaming.....	New Liskeard.....	1	..
Nipissing.....	Markstay.....	..	1
Nipissing.....	North Bay.....	4	1
Thunder Bay.....	Port Arthur.....	4	7
Sudbury.....	Sudbury.....	..	..
Kenora.....	Kenora.....	1	..
		38	59

Statement showing the number of purchases, acres sold and patents issued in cities, towns and town plots during the year ending October, 31st, 1929.

Towns, etc.	District or County	Agent	No. of acres sold	No. of purchasers	No. of patents issued	No. of acres patented
Alexandra.....	Cochrane.....	Unattached.....	.50	2	2	.50
Armstrong.....	Thunder Bay.....	".....	.20	1	..	..
Bartleman.....	Temiskaming.....	C. A. Duval.....	.07	1	2	.20
Capreol.....	Sudbury.....	Unattached.....	.13	1	2	.25
Dryden.....	Kenora.....	J. E. Gibson.....	..	..	1	.75
Ford City.....	Essex.....	Unattached.....	.10	1	1	.10
Gogama.....	Sudbury.....	".....	.11	2	2	.33
Gowganda.....	Temiskaming.....	".....	.19	1	2	.44
Hearst.....	Cochrane.....	J. Bresnahan.....	..	..	1	.23
Hilton.....	Algoma.....	W. J. Trainor.....	..	..	1	1.50
Hornepayne.....	".....	Unattached.....	.22	1	..	..
Hamilton.....	Wentworth.....	".....	..	..	2	5.25
Killarney.....	".....	".....	.10	1	1	10
Kapuskasing.....	Cochrane.....	H. E. Sheppard.....	.60	2	4	.69
Kirkland Lake.....	Temiskaming.....	Unattached.....	1.17	2	21	2.40
Keswick.....	York Co.....	".....	1.43	..	2	1.43
Macdiarmid.....	Thunder Bay.....	".....	..	..	1	.19
Missinabi.....	Algoma.....	John Bresnahan.....	.17	2	3	.77
Macfarlane.....	Kenora.....	Unattached.....	..	..	1	.93
Matheson.....	Cochrane.....	J. A. Hough.....	..	..	1	.24
Nakina.....	Thunder Bay.....	Unattached.....	.17	2	5	.87
Opasatika.....	Cochrane.....	".....	.50	..	1	.50
Sioux Lookout.....	Kenora.....	".....	1.10	5	15	4.04
Swastika.....	Temiskaming.....	".....	.48	2	4	.69
Savant.....	Thunder Bay.....	".....	1.92	8	1	.48
Winnipeg River Crossing.....	Kenora.....	".....	.34	1	3	1.26
Waldohf.....	".....	J. E. Gibson.....	.50	2	..	..
			10.00	37	79	34.04

Appendix No. 13—Continued

ISLANDS SOLD

Statement showing Islands sold as Summer Resorts

Part or Parcel	Township	District or County	Agent	No. of acres sold
Parcel 36, Pine Island		Algoma	E. H. Barnes	2.90
Island 517-A	Harrison	Parry Sound	Miss I. M. Campbell	.55
Parcel of Island 417-A, Georgian Bay	"	"	"	.90
Island K.G., Georgian Bay	"	"	"	.50
Island B-605	Cowper	"	"	1.10
Cameron Island	"	"	"	5
Pt. Island B-297	Conger	"	"	.70
Island D-351	"	"	"	4.40
Island in Otter Lake	Foley	"	"	2
Island opposite Northwest Lot 26, Con. 10	Hardy	"	H. J. Ellis	2
Island D, Clear Lake	Perry	"	A. W. Freeland	1
Pt. George Island, Lake Huron		Manitoulin	Unattached	9.70
Parcel 9 of Island T.P. 1503		"	"	1.80
Island T.P. 2451, White Fish Bay		"	"	2.44
Pt. George Island		"	"	3.20
Parcel 3 of Island T.P. 2831		"	"	5.40
Parcel 4 of Island T.P. 2831		"	"	3.50
Pt. of Island T.P. 1902, McGregor Bay		"	"	6.00
Island T.P. 2584		"	"	.71
Island T.P. 2781, White Fish Bay		"	"	1.32
Island T.P. 2566		"	"	4.28
Garden Island, Trout Lake	Palmerston	Frontenac	Chas. Both	1.50
Birch Island, Paudash Lake	Cardiff	Haliburton	A. N. Wilson	1.02
Island opposite Lot 19, Con. 2	Cavendish	Peterboro'	"	.80
Island in Gananoque River opposite Lot 7, Con. 9	Lansdowne	Leeds	"	1.06
Island I, Weslemekoon Lake	Ashby	Frontenac	Unattached	5.60
Weightman Island	St. Joseph Channel		"	1
Island 30, Mud Lake	S. Crosby	Leeds	"	.55
Tea Island, Gananoque Lake	Leeds	"	"	.62
Island G.R. 51, Wahnapiatae Lake	Maclennan	Sudbury	"	.60
Island 41, Wahnapiatae Lake	"	"	"	2.60
Island C, Clearwater Lake		"	"	1.50
Part of Island on Bear Lake		"	"	2.00
Island T.P. 3793, Tyson Lake		"	"	2.00
Island T.P. 3236		"	"	.70
Island 269	Bertram	"	"	1.20
Island G.R. 49	Rathbun	"	"	.70
Butterfield Island	Elmsley	Lanark	"	3.50
Pt. Island 131	Matchedash	Simcoe	"	.50
Island H.H. 127		Kenora	"	4.78
Island H.H. 197		"	"	4.44
Island G. 2010, Sabaskong Bay		"	"	4.90
Pt. Island G. 2019		"	"	4.50
Pt. Corkscrew Island		"	"	2.63
Island G. 2025, Sabaskong Bay		"	"	6

Appendix No. 13—Continued

ISLANDS SOLD—Continued

Statement showing Islands sold as Summer Resorts

Part or Parcel	Township	District or County	Agent	No. of acres sold
Island G. 2022, Lake of the Woods.....		Kenora.....	Unattached.....	.25
Island L.K. 349.....		“.....	“.....	5.35
Island G. 2004, Sabaskong Bay.....		“.....	“.....	3.20
Island T.D. 10, Winnipeg River.....		“.....	“.....	.60
Island W.D. 323, Andrew Bay.....		“.....	“.....	6.23
Island G. 2011, Sabaskong Bay.....		“.....	“.....	.70
Island W.D. 114, Bigstone Bay.....		“.....	“.....	2.20
Island G. 2038, Sabaskong Bay.....		“.....	“.....	5.80
Island G. 1883, Lake of the Woods.....		Rainy River.....	“.....	6.00
Lot B, Block 5, Island A.....		“.....	“.....	4.00
Island P, Clearwater Lake.....		“.....	“.....	1.00
Island G. 2023.....		“.....	“.....	3.10
Island G. 2016.....		“.....	“.....	.08
Island G. 2950.....		“.....	“.....	1.50
Island G. 2017, Lake of the Woods.....		“.....	“.....	9.20
Island V, West Bay.....	Loudon.....	Nipissing.....	T. A. Millichamp.....	4.00
Island S.S. 74, Walkers Lake.....		Thunder Bay.....	Unattached.....	.74
				168.05

Appendix No. 13—Continued

ISLANDS PATENTED

Statement showing Islands patented as Summer Resorts

Part or Parcel	Township	District or County	Agent	No. of acres Pat'd
Southwest Pt. Island 47, South Bay, Lake Nipissing.....		Parry Sound.....	H. J. Ellis.....	5
Island 45, Lake Nipissing.....		“.....	“.....	.45
Parcel 4 of Island 47-A, Georgian Bay.....	Harrison.....	“.....	Miss I. M. Campbell.....	.90
Island B-724.....	Cowper.....	“.....	“.....	.80
Pt. Island 370, Loon Bay of Georgian Bay.....	Carling.....	“.....	“.....	5
Island C-22.....	“.....	“.....	“.....	1.97
Island D, Cariboo Lake.....	McConkey.....	“.....	“.....	3.80
Island S, Lake Joseph.....	Humphrey.....	“.....	“.....	.40
Island G.R. 49 Wahnapiatae.....	Allen.....	Sudbury.....	Unattached.....	.70
Island H, French River.....	Mason.....	“.....	“.....	4
Island Lake N.W. ¼ Lot 11.....	Aweres.....	Algoma.....	E. H. Barnes.....	1
Island Lake S.E. ¼ Lot 11.....	“.....	“.....	“.....	.15
Island F, Paudash Lake.....	Cardiff.....	Haliburton.....	A. N. Wilson.....	5
Birch Island.....	“.....	“.....	“.....	1.02
Island in Gananoque River.....	Lansdowne.....	Leeds Co.....	Unattached.....	1.06
				31.25

Appendix No. 13—Continued

MAINLAND SOLD

Under Summer Resort Regulations

Part or Parcel	Township	District or County	Agent	No. of acres
Location P.P. 628, Two Island Lake.....	Jacques & Fowler	Thunder Bay...	S. H. Wilson.....	3.5
Location P.P. 629, Two Island Lake.....	"	"	"	3.6
Location P.P. 630, Two Island Lake.....	"	"	"	4.6
Location P.P. 631, Two Island Lake.....	"	"	"	4.6
Location P.P. 635, Two Island Lake.....	"	"	"	3.6
Location P.P. 636, Two Island Lake.....	"	"	"	4.10
Location P.P. 637, Two Island Lake.....	"	"	"	4.7
Location P.P. 639, Two Island Lake.....	"	"	"	3.5
Location P.P. 640, Two Island Lake.....	"	"	"	4
Location P.P. 642, Two Island Lake.....	"	"	"	5.5
Location P.P. 643, Two Island Lake.....	"	"	"	3.4
Location P.P. 644, Two Island Lake.....	"	"	"	4.8
Location P.P. 645, Two Island Lake.....	"	"	"	5.8
Location P.P. 646, Two Island Lake.....	"	"	"	5
Location P.P. 648, Two Island Lake.....	"	"	"	6.1
Location P.P. 649, Two Island Lake.....	"	"	"	4.7
Location P.P. 650, Two Island Lake.....	"	"	"	3
Location P.P. 669, Two Island Lake.....	"	"	"	4.1
Location 30-A, Trout Lake.....	Ware	"	"	.07
Location 40, Trout Lake.....	"	"	"	1.97
Location 42, Trout Lake.....	"	"	"	1.17
Location 44, Trout Lake.....	"	"	"	1
Location 45, Trout Lake.....	"	"	"	1.19
Location 12, Trout Lake.....	Gorham	"	"	.96
Location 14, Trout Lake.....	"	"	"	.78
Location 15, Trout Lake.....	"	"	"	.76
Location 28, Trout Lake.....	"	"	"	1.53
Location 30, Trout Lake.....	"	"	"	.30
Location 56, Trout Lake.....	"	"	"	2.36
Location P.P. 168, Lower Shebandowan Lake.....		"	"	1.86
Location S.F. 67, Shebandowan Lake.....		"	"	4.90
Location P.P. 177, Lower Shebandowan Lake.....		"	"	1.57
Location P.P. 182, Lower Shebandowan Lake.....		"	"	1.77
Location P.P. 184, Lower Shebandowan Lake.....		"	"	1.84
Location P.P. 339, Lower Shebandowan Lake.....		"	"	1.80
Location P.P. 482, Lower Shebandowan Lake.....		"	"	1.59

Appendix No. 13—Continued

MAINLAND SOLD

Under Summer Resort Regulations

Part or Parcel	Township	District or County	Agent	No. of acres
Location P.P. 483, Lower Shebandowan Lake.....		Thunder Bay...	S. H. Wilson	1.62
Location J.K. 196, Jackfish Bay.....		"	Unattached.....	.29
Location S.F. 73.....		"	"	5.00
Location S.F. 65.....		"	"	1.65
Land at Marvella Station.....		"	"	1.40
Lake Wahnapiatae.....	Maclennan.....	Sudbury.....	"	2.80
Lake Wahnapiatae.....	"	"	"	3
Part Lot 13, Con. 2.....	Mason.....	"	J. P. Marchildon	5
Location 10, Clearwater Lake.....		Rainy River.....	J. A. Alexander.....	1.26
Location 34, Clearwater Lake.....		"	"	3
Location 69, Clearwater Lake.....		"	"	1.45
Location 112, Clearwater Lake.....		"	"	1.05
Location 113, Clearwater Lake.....		"	"	1.08
Location 133, Clearwater Lake.....		"	"	1.29
Location 134, Clearwater Lake.....		"	"	1
Location 135, Clearwater Lake.....		" .....	" .....	.53
Location 137, Clearwater Lake.....		" .....	" .....	.60
Pt. Location G. 2949.....		"	Unattached.....	5
Location R.R. 15.....		" .....	" .....	.87
Pt. Location L.K. 353, Granite Lake.....		Kenora.....	"	4.50
Location L.K. 348, Clear Water Bay.....		" .....	" .....	.60
Location L.K. 352.....		"	"	6.60
Location L.K., 350, Rocky Lake.....		"	"	3.15
Location L.K. 355, Rocky Lake.....		"	"	4.95
Location G. 881.....		"	"	5
Pt. Location K. 12.....		"	"	4
Location T.D. 70, Sand Lake.....		"	"	8
Location L.K. 356.....		"	"	1.08
Location A-10.....		"	"	3.65
Location J.K. 197.....		"	"	5.00
Pt. of Location J.C. 40, Ptarmigan Bay.....		"	"	5.40
Pt. Location J.C. 40, Ptarmigan Bay.....		"	"	5.40
Pt. Location M.H. 50, Portage Bay.....		"	"	4.95
Location L.K. 338, Clear Water Bay.....		"	"	3.90
Location L.K. 284, Long Pine Lake.....		"	"	3.30
Location L.K. 309, Granite Lake.....		"	"	4.55
Location L.K. 308, Granite Lake.....		"	"	4.54
Parcel at Little Vermillion Lake.....		"	"	5.00
Parcel at Little Vermillion Lake.....		"	"	5.00
Location L.K. 364, Island Lake.....		"	"	5.00
Location L.K. 365, Island Lake.....		"	"	5.00
Location D. 11, Clear Water Bay.....		"	"	5.00

Appendix 13—Continued

MAINLAND SOLD

Under Summer Resort Regulations

Part or Parcel	Township	District or County	Agent	No. of acres
Pt. Location L.K. 276.....		Kenora.....	Unattached.....	97
Location L.K. 362.....		".....	".....	1.80
Location A-9.....		".....	".....	3.78
Pt. Southwest $\frac{1}{4}$ Section 11..	Aweres.....	Algoma.....	E. H. Barnes.....	.60
Part of South half Lot 12, Con. 4.....	Grassett.....	".....	Unattached.....	5.00
Part Lot 7, Con. 5.....	Croft.....	Parry Sound.....	J. S. Freeborn.....	5
Part Lot 11, Con. 18.....	Nipissing.....	".....	H. J. Ellis.....	2
Part of Lot 9, Con. A.....	Odrig.....	Nipissing.....	Unattached.....	14.00
Land on Boyce Lake.....		".....	".....	18
Part Lot 10, Con. 2.....	Maisonville.....	Cochrane.....	J. A. Hough.....	6.50
Part Lot 11, Subdivision, Lot 12, Con. 1.....	Cardwell.....	Muskoka.....	W. G. Gerhart.....	1.04
Part Lots 6 and 7, Con. 9.....	Anglesea.....	Lennox and Add- ington.....	Unattached.....	22.45
Part Lot 3, Con. 7.....	Wicklów.....	Hastings.....	David Fuller.....	5
Part Lot 11, Con. 5.....	Limerick.....	".....	".....	.50
Part Lot 25, Con. 9.....	Methuen.....	Peterboro'.....	Wm. Hales.....	5
Part Lot 31, Con. 5.....	Dummer.....	".....	Unattached.....	1.00
Parcel at Osaburg Post.....		Lake St. Joseph..	".....	25.00
				365.12

Appendix No. 14

PATENTS OFFICE (Lands Branch)

Statement of Patents, etc., issued from 1st November, 1928, to 31st October, 1929.

Public Lands (Patents).....	520
Free Grant Lands (Patents).....	236
Mining Lands (Patents).....	704
Mining Leases.....	140
Crown Leases.....	12
Licenses of Occupation.....	283
Temagami Island Leases.....	5
Sand and Gravel Licenses.....	49
Pine Patents.....	17
Water Power Leases.....	7
Algonquin Park Leases.....	7
Rondeau Park Leases.....	70
Bruce Beach Leases.....	104
Dredging Leases.....	2
Total.....	2,156

Appendix No. 15

RECORDS BRANCH 1928-1929

Communications received:

From Crown Land Agents.....	7,493
From Crown Timber Agents.....	5,135
From Mining Recorders.....	4,782
From Homestead Inspectors.....	2,870
From Superintendent Algonquin Park.....	567
From Superintendent Quetico Park.....	168
From Superintendent Rondeau Park.....	633
Orders-in-Council.....	195
Telegrams.....	364
All other sources.....	29,677

Total incoming (Minister's office and Land Tax Branch not included)..... 51,889

Communications sent out:

To Crown Land and Timber Agents, Inspectors and Park Superintendents.....	20,399
To General Public.....	21,700
Circular letters re timber sales and mill licenses.....	5,500
Maps and blue prints by Surveys Branch.....	7,000
Summer Home booklets, free maps and statistics.....	4,500

Total outgoing (Minister's office and Land Tax Branch not included)..... 59,099

Files:

New files issued—General.....	4,500
New files issued—Accounts Chargeable.....	1,047
New files issued—Accounts free.....	336

Appendix No. 16

REPORT OF SURVEYOR-GENERAL

The following surveys were carried out under instructions from this Department during the past year:—

PROVINCIAL BOUNDARIES

Ontario-Manitoba Boundary from 12th Base Line to Eastern end of Island Lake, by Ontario Land Surveyor J. W. Pierce, Ottawa.

BASE AND MERIDIAN LINES

Seventh Base Line east, continued through District of Cochrane by Ontario Land Surveyors Beatty & Beatty, Pembroke.
Base and Meridian Lines in the district of Kenora, Patricia portion by Ontario Land Surveyors, Phillips & Benner, Port Arthur.
Meridian Line in the district of Kenora, by Ontario Land Surveyors, Speight & vanNostrand, Toronto.
Meridian Line in the district of Kenora, Patricia portion, by Ontario Land Surveyor C. R. Kenny, Sault Ste. Marie.

RE-SURVEYS

Resurvey of township boundaries in the district of Sudbury, by Ontario Land Surveyor, J. R. Gill, Sudbury.
Resurvey of Township boundaries in the districts of Sudbury and Temiskaming, by Ontario Land Surveyor, E. L. Moore, North Bay.
Resurvey of township boundaries in the Districts of Temiskaming and Cochrane, by Ontario Land Surveyor H. W. Sutcliffe, New Liskeard.
Resurvey of Concession and Side Lines in the townships of McCool, Beatty and Munro, district of Cochrane, by Ontario Land Surveyor E. W. Neelands, New Liskeard.

LAKE AND RIVER TRAVERSES

Traverse survey of waters north of Lake St. Joseph, district of Kenora, Patricia portion, by Ontario Land Surveyor, C. R. Kenny, Sault Ste. Marie.
Traverse survey of Albany River, in the district of Cochrane, by Ontario Land Surveyor, J. S. Dobie, Thessalon.

ROAD SURVEYS

Survey of constructed roads in the township of Nipissing, by Ontario Land Surveyor, E. Stewart, Collingwood.
Survey of constructed roads in the district of Sudbury, by Ontario Land Surveyor, E. L. Cavana, Orillia.
Survey of constructed roads in the district of Algoma, by Ontario Land Surveyor, C. E. Bush, Toronto.

- Survey of constructed roads in the district of Manitoulin, by Ontario Land Surveyor, T. J. Patten, Little Current.
- Survey of constructed roads in the district of Kenora, by Ontario Land Surveyor, R. S. Kirkup, Fort William.
- Survey of constructed roads in the township of Pellatt, district of Kenora, by Ontario Land Surveyor, A. McMeekin, Kenora.
- Survey of constructed roads in the district of Temiskaming, by Ontario Land Surveyor, A. Matheson, Swastika.
- Survey of constructed roads in the district of Rainy River, by Ontario Land Surveyor, D. J. Gillon, Fort Frances.

SUMMER RESORT SURVEYS

- Townplot on Nemogos, in the district of Sudbury, by Ontario Land Surveyor, C. E. Fitton, Toronto.
- Summer Resorts on One Sided Lake, district of Rainy River, by Ontario Land Surveyor, D. J. Gillon, Fort Frances.
- Summer Resorts on Island Lake in the township of McMahan, by Ontario Land Surveyor, T. J. Patten, Little Current.

MISCELLANEOUS SURVEYS

- Survey of certain Mining Claims in Township 28, Range 24, district of Algoma, by Ontario Land Surveyor, R. S. Code, Toronto.
- Resurvey of part of the townplot of Inverhuron, in the County of Bruce, by Ontario Land Surveyor, E. D. Bolton, Listowel.
- Control survey for aerial mapping, in the district of Sudbury, by Ontario Land Surveyor, W. F. B. Rubidge, Port Credit.
- Reference Points on Crow River in the district of Kenora, Patricia portion, by Ontario Land Surveyor, H. W. Sutcliffe, New Liskeard.

SUBDIVISIONS UNDER TOWNSITES ACT.

- Subdivision of Lot No. 4, Island A. 1, Sesekinika Lake, in the township of Grenfell.

MUNICIPAL SURVEYS

Municipal surveys performed under instructions and authority of the Lieutenant-Governor-in-Council, were completed and confirmed as follows:—

1. Part of Main Street in the City of Hamilton.
2. Boundaries of Lots 4 and 5, Concession 3, south of Dundas Street, township of Toronto.
3. Original road allowance from Lot 149 northerly, in the township of Thorold.
4. Original road allowance between Lots 20 and 21, in the 7th Concession, in the township of Hope.

Maps

- The following maps have been published during the year:—
- 24 A. Kenora and Rainy River. (Revised reprint).
- 20 D. Quetico Provincial Park. (New).

23 A. Thunder Bay District. (Reprint).

21 A. Southern Ontario. (Revised reprint).

Key map of Islands in Georgian Bay. (New). Township Plans of Cowper, McKenzie, Harrison, Freeman, and Humphry. (Reprints).

Part of the District of Temiskaming, at the head of Lake Temiskaming. (Revised reprint).

Pulpwood Timber Limit. District of Sudbury. (New).

Extracts from the reports of the several surveyors employed during the year, will be found in Appendices 21 to 32.

L. V. RORKE,

Surveyor-General.

Deputy Minister.

Appendix No. 17

Statement of Municipal Surveys for which instructions issued during the twelve months ending October 31st, 1929

No.	Surveyor	No.	Date of Instructions	Description of Survey
1	Herbert Johnston....	765	Dec. 7, 1928	Side road allowance between lots 9 and 10 from S. of con. 7 to N. limit of con. 14 in western section. Road allowance between cons. 6 and 7 in western section. Road allowance between cons. 7 and 8 in eastern section. Road allowance between eastern and western sections of township across cons. 1 to 6, from S. limit of western section, all in township of Wellesley.
2	T. Campbell Smith...	766	Dec. 17, 1928	Side road allowance between lots 20 and 21, 7th con., Township of Hope.
3	T. H. Wiggins.....	767	Dec. 18, 1928	Concession road allowance between 10th and 11th con., lots 12 to 28 inclusive, township of Cumberland.
4	Herbert Johnston....	768	Dec. 19, 1928	Boundaries of County road in township of Woolwich—part of County Road No. 9, known as Waterloo-Elmira Highway, from southerly to northerly boundary of township of Woolwich.
5	Herbert Johnston....	769	Dec. 19, 1928	County Road No. 9 from N. boundary of town of Waterloo to N. boundary of township of Waterloo, known as Waterloo-Elmira Road, through lots 12, 7, 8, 9, in the German Company Tract, of township of Waterloo.
6	W. F. B. Rubidge...	770	Apr. 10, 1929	Boundaries of road allowances in and adjoining township Chinguacousy; road allowance on east boundary of township throughout its entire length. Road allowance along south boundary of township from centre road to east boundary, across cons. 1 to 6; road allowance between lots 5 and 6 across cons. 2 to 6, east of centre road. Allowance between lots 17 and 18, across cons. 1 to 6, east of centre road. Allowance between lots 27 and 28, cons. 1 to 6, east of centre road.
7	Maxim T. Gray.....	771	Apr. 22, 1929	Boundaries of certain streets in the village of Fort Erie as shown on registered plans. Also part of township lot 3, con. 1, Township of Bertie.
8	Speight & vanNstrand.....	772	May 7, 1929	Kipling Avenue between Lake Shore Road and Queen Street in municipalities of New Toronto and township of Etobicoke—between lots 5 and 6, con. 1 of S. part of township and road allowance on the W. across lots 6 to 9.
9	W. F. B. Rubidge...	773	July 2, 1929	Boundaries of original road allowance between lots 30 and 31 in con. 2, south of Dundas Street, township of Toronto.
10	Campbell T. Smith..	774	July 31, 1929	Boundaries of Cavan Street and that part of Mill Street between Walton Street and Ontario Street in the Town of Port Hope.
11	MacKay & MacKay	775	Aug. 6, 1929	Original road allowance between lots 14 and 15 across broken front and cons. 1, 2, and 3 in the township of Saltfleet.

Appendix No. 18

Statement of Municipal Surveys confirmed during the twelve months ending October 31st, 1928

No.	Surveyor	No.	Date of Instructions	Description of Survey	Date of Confirmation
1	Jas. J. MacKay	710	Dec. 5, 1916	Limits of part of original allowance for road between 2nd and 3rd cons. of township Barton (now called Main Street) lying in city of Hamilton between original allowance for road between lots 18 and 19 on the east, and division line between townships Barton and Ancaster on the west.	Nov. 30, 1928
2	Speight & van Nostrand....	748	Dec. 23, 1925	Front and rear angles and the southerly and easterly boundaries of lots 4 and 5 in con. 3 S. of Dundas Street, Township of Toronto.....	April, 18, 1929
3	F.L. Rutherford	763	Sept. 24, 1928	Original road allowance from south boundary of lot 149 at the southeast angle in township of Thorold northerly to the northern boundary of the township.....	May 16, 1929
4	Camp. T. Smith	766	Dec. 17, 1928	Side road allowance between lots 20 and 21 in the 7th concession of township of Hope.....	April 10, 1929

Appendix No. 19

Statement of Crown Surveys in progress during the twelve months ending October 31st, 1929

No	Date of Instructions	Name of Surveyor	Description of Survey	Amount paid
1	Mar. 21, 1929	E. D. Bolton.....	Westerly part town plot of Inverhuron in County of Bruce.....	\$1,250 00
2	Mar. 23, 1929	Beatty & Beatty.....	Base line in District of Cochrane.....	9,900 00
3	April 9, 1929	Phillips & Benner.....	Base and meridian line in Patricia portion, District of Kenora.....	7,840 00
4	April 9, 1929	Speight & vanNstrand.....	Survey meridian line, District Kenora.....	7,599 00
5	April 9, 1929	C. R. Kenny.....	Meridian line and traverse certain waters north of Lake St. Joseph, District of Kenora (Patricia portion).....	5,200 00
6	April 9, 1929	J. R. Gill.....	Retracement of township boundaries, district Sudbury.....	3,300 00
7	April 9, 1929	E. L. Moore.....	Retracement of certain township boundaries in district of Sudbury and Temiskaming.....	5,600 00
8	April 9, 1929	H. W. Sutcliffe.....	Retracement of certain township boundaries district Temiskaming and Cochrane.....	1,500 00
9	May 15, 1929	E. W. Neelands.....	Retrace certain lines in District of Cochrane.....	1,000 00
10	April 30, 1929	C. E. Fitton.....	Small location lots at Nemegos district of, Sudbury.....	200 00
11	May 2, 1929	D. J. Gillon.....	Summer resorts One Sided Lake, district of Rainy River.....	970 00
12	May 1, 1929	J. S. Dobie.....	Traverse Albany River, district Cochrane..	7,500 00
13	May 4, 1929	C. E. Fitton.....	Summer resorts Temagami Islands, district Nipissing.....	1,198 00
14	May 13, 1929	J. W. Pierce.....	Survey Ontario and Manitoba boundary..	3,000 00
15	May 15, 1929	Elihu Stewart.....	Roads in district Nipissing and Sudbury...	3,700 00
16	May 10, 1929	E. L. Cavana.....	Survey roads in district Sudbury.....	2,000 00
17	May 1, 1929	R. S. Kirkup.....	Roads in district Kenora.....	2,900 00
18	May 15, 1929	C. E. Bush.....	Roads in district Algoma.....	4,390 00
19	May 1, 1929	D. J. Gillon.....	Roads in district Rainy River.....	2,450 00
20	May 22, 1929	T. J. Patten.....	Roads in district Sudbury and Manitoulin..	700 00
21	May 28, 1929	A. McMeekin.....	Roads in district Kenora.....	900 00
22	May 31, 1929	A. Matheson.....	Roads in district Temiskaming.....	3,500 00
23	Aug. 5, 1929	T. J. Patten.....	Summer resorts at Island, Aberdeen and Patten Lakes in township McMahon....	800 00
				\$77,396 00

Appendix No. 20

Statement of Crown Surveys completed and closed during twelve months ending
October 31, 1929

No	Date of Instructions	Name of Surveyor	Description of Survey	Amount paid
1	May 29, 1928	E. L. Moore	Township boundaries in district Nipissing..	\$4,643 80
2	May 21, 1928	W. F. B. Rubidge	Certain miscellaneous surveys in district Parry Sound and Nipissing control for aerial mapping	2,722 80
3	June 16, 1928	Phillips & Benner	Summer resort locations in Two Island Lake Township of Jacques, district of Thunder Bay	1,351 48
4	May 21, 1928	E. L. Cavana	Traverse survey, districts Parry Sound and Nipissing Control aerial mapping	6,957 99
5	June 16, 1927	T. B. Speight	Certain side lines and concession lines in Township Ameliasburg	306 37
6	April 11, 1927	E. L. Cavana	Traverse shore line Sturgeon Lake, district Thunder Bay	568 40
7	May 15, 1928	C. E. Fitton	Summer resort lots on shores and islands in Gull Lake, Township Lutterworth	1,290 16
8	April 16, 1928	Beatty & Beatty	Survey of base line, district Thunder Bay.	2,587 19
9	.....	E. W. Neelands	Survey of part lot 10, con. 1, Maisonville, district Temiskaming	85 95
10	May 21, 1928	Jas. T. Coltham	Certain miscellaneous surveys in the district of Parry Sound, control for aerial mapping	2,499 15
11	Aug. 15, 1928	C. E. Fitton	Summer resort lots in Cardwell township, district of Muskoka	657 64
12	Dec. 13, 1928	Phillips & Benner	Road through part broken lot 1, con. 8, Township of Ware, district of Thunder Bay	52 25
13	April 25, 1928	Speight & van- Nostrand	Certain base and meridian lines, district Kenora	1,986 12
14	Jan. 15, 1929	J. C. Butterfield	Surveys in Storrington and Lake townships, County of Frontenac	229 67
15	July 15, 1928	A. Matheson	Survey summer resort locations in Temagami Lake, District of Nipissing	1,272 20
16	May 10, 1928	D. J. Gillon	Summer resort locations Clearwater Lake district Rainy River	1,669 75
17	May 18, 1928	C. H. Wilkins	Establish monuments between Rat House Bay and Favourable Lake, district Kenora (Patricia portion)	743 09
18	May 15, 1928	C. R. Kenny	Traverse certain rivers in Michipicoten area, district of Algoma	913 64
19	June 15, 1928	Arch. Gillies	Traverse Kamiskotia River, district of Cochrane	525 25
20	April 16, 1928	James S. Dobie	Traverse from Lake St. Joseph down the Albany River, district of Thunder Bay..	1,680 00
21	May 1, 1928	J. R. Gill	Township outlines, district Manitoulin and Sudbury	2,072 15
22	May 10, 1928	T. J. Patten	Traverse of lakes and rivers near McGregor Bay, district Sudbury and Manitoulin	650 40
23	May 10, 1928	E. W. Neelands	Township outlines, district Nipissing	2,345 00
24	July 2, 1929	W. F. B. Rubidge	Control survey in district Nipissing and Sudbury for aerial mapping	2,024 18
25	July 18, 1929	R. S. Code	Mining claims in Township 28, range 24, district of Algoma	1,674 51
26	Mar. 14, 1929	H. W. Sutcliffe	Fixing traverse reference points on Crow River, district Kenora (Patricia portion).	100 00
				\$41,619 14

Appendix No. 21

Extract from report and field notes of part of Seventh Base Line, Districts of Thunder Bay and Cochrane, by Beatty and Beatty, O.L.S., 1928.

SOIL

There was no land suitable for agricultural purposes along this line. The greater portion of the soil was sandy with boulders and gravel ridges with outcrops of granite. A patch of sandy clay soil in the swamps with gravel ridges was crossed near the Esnagami River. East of Squaw Lake the soil is again sandy clay in the swamps, with low granite ridges. This portion of the country is undulating and flat. The western portion of the line is rough, broken country with many hills but from Marshal Lake east it is rolling with very few prominent ridges. From information gathered from the District Forester, there is not much information to the country east as there are very few Lakes, only large rivers, showing that the country is flat and low.

TIMBER

Several small patches of good timber suitable for pulpwood were passed through and these are shown green on the accompanying Timber Plan. The better patches being miles 137 and 145 in the vicinity of Summit Lake, the 154th mile south of Marshal Lake, miles 156 to 162 east of Marshal Lake, miles 184 and 185, miles 187 to 190 along the Esnagami River in the District of Thunder Bay, also from mile 3 to Squaw Lake and mile 8 to 16 in the District of Cochrane. The timber in these patches is mostly black spruce, averaging from 3 to 10 inches, with jack-pine, poplar, birch and white spruce on the ridges, 6 to 18 inches in diameter, near mile 120, we left the old brule on the western portion of our line the previous season, and crossed a section of country covered with a thick growth of spruce, jack-pine, poplar and birch, 3 to 8 inches in diameter, intercepted with a patch of heavier timber. This continued to mile 146, where we crossed a section apparently burnt over about two or three years ago. This had been a good strip of timber, consisting of spruce, jack-pine, poplar and birch, from 6 to 18 inches. The timber is mostly still standing and the dry cutting greatly retarded our progress. This continued to mile 167. Had this section not been burnt, it would have been one of the best sections of bush we have seen. There are patches of green timber through it and other patches where about 50% of trees are dead. From mile 167 east to mile 3 in the District of Cochrane, we crossed through thick spruce, jack-pine, birch and poplar, 3 to 8 inches in diameter, with patches of good timber as mentioned above. From mile 8 east to the end of the line it is mostly swamp with black spruce from 3 to 10 inches with patches of stunted cedars 3 to 12 inches in diameter.

There were no fires in the district this year, but during the month of July, we were bothered with smoke from fires to the north-west of us.

MINERALS

There were no indications of minerals in this district. All the outcrops of rock were granite and very few quartz veins through it.

STREAMS AND LAKES

There were very few large lakes crossed by our line, the largest ones were Summit Lake, Marshal Lake, O'Sullivan Lake, Storm Lake and Squaw Lake. The Little Jackfish River, Lily River, Kawashkagama River and Esnagami River,

were crossed. We did not see any falls on these rivers, capable of development. The Little Jackfish River, averages about 100 feet wide and has an average current of about $1\frac{1}{2}$ miles per hour. There are several short swift places outside of the rapids. The other rivers have very little current, except at the rapids and are shallow. Marshal Lake would have been an excellent Lake for tourists, but since the recent fire has not much attraction. One American, Col. Deeds, has a very extensive camp on an island in this lake. It is one of the most up-to-date camps conceivable. O'Sullivan Lake has been traversed and a full report made on it, before as has also Squaw Lake.

CANOE ROUTES

Five canoe routes were crossed, leading to the Canadian National Railways, besides route used going in, up Little Jackfish River. From Summit Lake, the route to Ombabika station has only short portages and can be made in about 5 hours. A route north leads to the Ogoki and Albany Rivers. From Summit Lake east there is a route along the Lily River and Lake, through Marshal Lake to Meta, Abamasagi Lakes on to O'Sullivan Lake. The Kawashkagama River crossed our line in the 165th mile. This river flows north to Abamasagi Lake and route goes south to Paska station on the Canadian National Railways. Our packers with a light canoe left Paska station and arrived at O'Sullivan Lake in a day. They made three short portages on the way.

From O'Sullivan Lake the Little Current River flows north. From the south east end of this lake there is a route to Nakina station via Esnagami Lake and Collins Lake to Cordingley Lake. The Esnagami River crossing our line at mile 189 flows from Esnagami Lake, it is shallow with mucky bottom between rapids. From Squaw Lake there is a route through John Bill Lake to Cammack Lake to Cordingley Lake, from the south end of which an automobile road, about $2\frac{1}{2}$ miles has been built to Nakina station, a divisional point, on the Canadian National Railway. This route goes north along Squaw River to the Little Current River. The portages between our line and Cordingley Lake east there is a route to Wababimiga Lake and River where trail is blazed to end of our line.

There was no route near our line between the Little Jackfish River and Summit Lake, so we carried a small canoe along the line and then sent packers back to take our canoes down the river to the railroad and brought them by train to Ombabika station and up the Ombabika River through Cross Lake to Summit Lake. We moved our supplies and camp by Lily River and Lake to Marshal and Muskrat Lakes. We sent canoes around by Abamasagi Lake and up Kawashkagama River to the line again. We fly-camped through on the line with our line crew. We again fly-camped through and sent canoe supplies around to north of O'Sullivan Lake. From the east end of O'Sullivan Lake we fly-camped through on the line to the Esnagami River, where our canoes and supplies again met us. From here we again fly-camped through to Storm Lake where our canoes and supplies met us coming by way of Squaw Lake. From Squaw Lake, east we moved camp along the line until we got close to Wababimiga River. We preferred to back track to Squaw Lake to sending our canoes around to meet us, and it leaves everything better for when the line is produced. From Squaw Lake we followed route to Nakina, arriving there on August 25th, where we disbanded our party and stored our canoes.

GAME.

There is very little game in the country of any kind. We did not see any signs of beaver or any other of the smaller animals. We saw only a few indi-

cations of moose and caribou. We met some Indians on O'Sullivan Lake and tourists on Squaw Lake.

Pike and pickerel are plentiful in all the lakes. There is excellent lake trout fishing in O'Sullivan, Esnagami and Squaw Lakes. There is good speckled trout fishing in Kawashkagama, Little Current, Esnagami and Squaw Rivers. We caught trout in Esnagami River up to $2\frac{1}{2}$ pounds. These rivers are all frequented by tourists. The best accommodations for tourists are had at Ombabika and Nakina, where there are good stores and plenty of guides procurable.

The season was exceptionally wet. We had very cold weather the early part of June and very hot weather in August. The water in the lakes and rivers was exceptionally high all season. We had several frosts during June and until well into July encountered frost, when digging the pits in the swamps.

The wet cloudy weather prevented us from getting very many observations but we observed wherever possible.

Appendix No. 22

Extract from the survey of the Seventh Base Line, in the District of Cochrane, by Messrs. Beatty & Beatty, Ontario Land Surveyors, 1929.

SOIL

Practically throughout the whole of the line run this year, the soil is clay or clay loam. This is covered with moss varying in thickness from 6 inches to 2 feet in depth, except in the muskegs, where we were unable to determine the depth of the moss. The country is nearly level but continually sloping to the east to the Kenogami River, generally at the rate of about 10 feet per mile, although there are several miles that are almost level. The country was very deceptive, as it always appeared to be level. From the Kenogami River east the country is gradually rising. We encountered occasional frost, in the muskegs, right up to the 20th of August and the frost was only about three inches below the surface in the bush until about the 10th of July. There was ice in the swamps, in heavy spruce, all summer.

At the English River Post, at the junction of the Ridge and Kenogami Rivers, potatoes and vegetables are grown by the post-keepers.

TIMBER

The country crossed this year up to the Kenogami River has not been subjected to fires for a very long time and there are several sections of good pulpwood through it. Miles 17 and 18 are second growth, spruce and jack-pine to 8 inches diameter. From Mile 18 to mile 29 there is some very good spruce 3-10 inches with patches of spruce 2-6 inches. Between mile 29 and 32 there is about $\frac{3}{4}$ of a mile of good spruce the balance being very old brule with small spruce to 6 inches. Between mile 32 and 42 about 40% is good spruce 3-12 inches and the balance is spruce and tamarac muskegs. From mile 42 to Round Lake, along Niven's Meridian to the jog and east for 10 miles, in all about 26 miles, it is muskeg with spruce and tamarac to 3 inches with occasional patches of spruce to 5 inches. This section has not been burnt over and some trees 3

inches in diameter are over 100 years old. From mile 10 east of Niven's Meridian to mile 32, it is alternate swamps of spruce 3-12 inches and muskegs of spruce and tamarac to 6 inches. The 33rd mile is spruce and cedar swamps to 12 inches diameter. The 34th and 35th mile are in a tamarac swamp with green tamarac to 10 inches. This is the best stretch of green tamarac we have seen for years. Scattered young spruce to 3 inches growing up through the tamarac. Mile 35 to the Big Ash River is swamp with spruce and cedar to 12 inches and along the west side of the river, white spruce, poplar and Birch to 16 inches. Between the Big Ash and Kenogami Rivers, along the line and to the north there is a piece of poplar, spruce and balm of gilead, 6 to 16 inches that escaped the fire. East of the English River mile 39 is all brule; the fire having run through about ten years ago. Mile 40 is spruce swamp with cedar to 10 inches; miles 41, 42 and 43 are burnt muskeg, with the swamps of spruce to the north and south. From the 43rd mile to the Pitushkabi River, the line across a muskeg with spruce and tamarac to 3 inches and large open patches through it. The same fire that has burnt along the Kenogami River ran east from the Pitushkabi River, along the rest of the line. There is some good spruce to the north of the line along the 50th mile and also on both sides of the line along the 53rd and 54th miles. Mile 55 to mile 59 is again burnt muskeg. Miles 60 and 61 are in muskeg with scattered spruce to 3 inches. Miles 62 and 63 are again burnt muskeg. There is a fringe of good timber along the Ridge River, mostly white spruce 6 to 20 inches with poplar and birch 6 to 16 inches.

There were no fires in the immediate district this season. There were fires to the north on the Drowning River and we were bothered with smoke from fires to the southwest.

MINERALS

There were no indications of minerals in this district.

STREAMS AND LAKES

As mentioned before we only crossed Round Lake this season. It is about two miles in diameter and was about $3\frac{1}{2}$ feet deep with muskeg bottom and weeds. The shores of the lake are moss, heaved up by the action of the ice. From the levels obtained, evidently this lake is on a hill. The lake drains south. The muskeg to the west, north and northeast are lower than the level of the lake. The Wababimiga, Drowning, Legarde, Big Ash, English and Pitushkabi Rivers, were crossed. These are all small rivers and are very shallow, especially in the summer, with the exception of the English River, which has been traversed by O.L.S. Code and a full report made on it.

CANOE ROUTES

As mentioned before we went in by the Wababimiga River. The next route crossed was on the Drowning River, leading to Twin Lakes, about 5 miles east of Nakina Station on the Canadian National Railways. The next route crossed was the Kenogami River, which is the main transport route to James Bay, leaving the Canadian National Railways at Pagwa River Station, following the Pagwa River to the Kenogami and down this to the Albany. There are no portages all along this route, but in the latter part of July and August, the water in the Pagwa River is very low.

We took in supplies with us on the start to take us across to Round Lake. We had to double up across the lakes and along the rivers with one of our freight

canoes but by using a Johnston engine, this did not inconvenience us much. From the Drowning River east, we moved along the line and carried a small canoe which proved to be a handicap because we did not use it. We sent some packers back to the Wababimiga River and thence to Nakina, where they took the train to Ogahalla Station, along with our next lot of supplies. These, they took down the Kenogami River and after making 8 portages, running numerous rapids, they reached where the Muskego River joins it, about 15 miles below O.L.S. Niven's Meridian. By lightening their loads they poled up the Muskego River about 20 miles to the winter trail that goes northeast to Round Lake. They portaged our supplies across here about $3\frac{1}{2}$ miles and met us at Round Lake on July 5th. We crossed Round Lake and fly-camped along Niven's Meridian to the corner of the jog. We cut a trail for the main camp and supplies to be moved northeast to our base line. This trail hit about $3\frac{1}{2}$ miles east of the corner. We, then continued to move east along the line, travelling without our small canoe, as we had learned from the Indians that there were no lakes. To save packing some of the heaviest stuff, we sent our canoes back from Round Lake down the Muskego and Kenogami Rivers to the Big Ash River, which we were told flowed nearly east along our line. When our packers arrived at the Big Ash River, they found the river nearly dry and had to abandon their canoes and carried some of the supplies in to us, walking up the bed of the river. We then sent two freight canoes up the Kenogami and Pagwa Rivers to the Canadian National Railways for supplies at Pagwa River Station. Owing to the lowness of the water, we had to dispose of our flour and canned goods at the track and get these from the Hudson's Bay Company at English River Post. Our big freight canoes only had about 700 pounds each but even then, the packers had to unload and double up on their loads to get through. Owing to exceptionally heavy rains on the 13th and 14th of August from the Kenogami River, we were able to send our canoes and light loads up the Ridge and Pitushkabi Rivers to meet our line again. From the Pitushkabi, we fly-camped east along the line to the Ridge River. We, then back-tracked to our canoes at the Pitushkabi. Although we had been having considerable rain, the Pitushkabi River was very low and we were only able to use our canoes for taking our outfit and had to walk the river or shores to the Ridge River. We went down the Ridge River to the Kenogami at English River Post. We then proceeded up the Kenogami and Pagwa Rivers to the Canadian National Railways. We found the water very low and had to walk the shores about half the way out. We arrived at Pagwa River Station on September the 7th, and disbanded our party and stored our canoes.

GAME

There is very little game in the country with the exception of caribou, which are very plentiful in the muskegs, west and north of Round Lake. This is an ideal country for them and being so far from travelled routes they are not molested. As many as six were seen together. Our packers saw several moose along the Muskego and Kenogami Rivers, above the Pagwa River. We only saw one fresh beaver dam all summer.

Speckled trout abound in all the rivers. We did not catch any in the Wababimiga or Drowning Rivers, owing to the water being so high while we were there, but there are several tourist parties taken in each season by guides from Nakina. The Indians net sturgeon in the Kenogami and Pagwa Rivers. We caught some small grass pike in the Round Lake.

We left Nakina about four days after the ice was out of the lakes and as might be expected, we had some cold weather and hailstorms, the first two weeks. The season was comparatively dry, although we had slight showers and cloudy weather, followed by westerly winds, which dried things up. We had a very heavy rain on the 13th and 14th of August and during the latter part of August several heavy thunder storms with very heavy lightning. The cloudy weather prevented our getting observations. We had the usual summer frosts. We had great difficulty at times in getting suitable camps. We had to corduroy in some cases around the campfire and between the tents and the floors of the tents had invariably to be covered with small trees and brush piled on them. On two occasions we had to move camp over 5 miles before we could even get a camp ground of any kind. What we termed low ridges this year would other years have been called swamps. We think the shortage of water in the rivers this year was largely due to the lack of snow last winter.

The Indian Reserve, on the Kenogami River, was found to be about 1 mile south of our line and is shown on the General Plan and Timber Plan.

The only trading posts passed were those at the junction of the Kenogami and Ridge Rivers, which have been in operation for some years. The Hudson's Bay Company and Revillion Freres have stores. There is an Anglican Church Mission and the presiding rector or missionary, teaches school for the Indian children. There are several permanent houses belonging to the Indians and several families in tents, the population in the summer being about 150.

Appendix No. 23

Extract from report and field notes of the resurvey of Township Boundaries in and adjoining the District of Nipissing, by E. L. Moore, O.L.S., 1928.

This survey consisted of retracing that part of the boundary line between the townships of Boulter, Lauder and Pentland lying south of the Canadian National Railway; the boundary line between Boulter and Wilkes; Chisholm, Himsworth, Laurier and Ballantyne; Joly and Paxton; Butt and Proudfoot; McCraney and Bethune and part of the line between Finlayson and Sinclair, in all a distance of approximately fifty-seven miles.

The original surveys of these townships were made between the years 1876 and 1882 by various surveyors and, apparently, the compass was the instrument employed, in nearly all cases, for running the lines. The country through which this line passes is very rough, hence the measurements and bearings as shown in the records of the original surveys are not very reliable but the fact that these surveys can be re-established after fifty years or more goes to show that these pioneer surveyors put a great amount of honest endeavour in their work.

Having employed a party of the most suitable men I could locate, I proceeded on the 25th June to Kiosk on the Canadian National Railway, that being the most convenient station to the north end of the survey and also being on a water route leading into my work. After testing my measuring instruments and breaking in the men to their respective duties, I finally got the survey proper under way, though I experienced some difficulty locating a starting point as the country in this vicinity had been severely burnt.

Lumbering operations have been carried on more or less throughout this country, hence there are several roads, if they can be called such, as in most

cases they were very bad. However, by taking advantage of these, I was able to do most of my moving by teams or trucks and thus eliminate man packing and reduce the cost of the work.

The method of survey was, briefly, a careful traverse of the original line which I was able to retrace in its entirety, there being scarcely a quarter of a mile any place on the line where I could not find unquestionable evidence of the original survey, though in many places it was difficult, as there are large burnt areas and areas in which the timber had been taken out leaving little trace of the original survey. At every point where I found satisfactory evidence of an original corner, I planted a new post of the most durable wood obtainable; these, in nearly all cases were mounded well with stones. The details of the posting are fully set out in my field notes. All posts were set on the true line between the townships, that is, in the centre of the allowance for road, except in a few cases as is shown in the field notes, where the post was planted on the limit of the road allowance. The marking on the posts was done by carving deeply in the wood with a sharp knife or scribe. Wooden posts planted to mark the intersection of a lot line with the boundary line were marked with the respective lot numbers in "Arabic" as well as the full name of the township. And posts planted to mark the intersection of a concession line with the boundary line were marked with the full name of the township and the respective numbers of the concessions in "Roman," together with the letter "R" indicating that the post marked the centre of the allowance for road between the concessions. At each post, where possible, two bearing trees were marked in the usual manner with the letters "B.T." The distance and astronomic bearing from the post to centre of the blaze on such trees were noted and recorded in the field notes. Standard Iron Posts and Rock Posts were planted where indicated and the usual pits and mounds constructed. As it required considerable experience to identify and re-establish the old land marks, I personally did this part of the work.

Chaining was carried on by means of a five-chain tape and a clinometer was used for reading the angles of slope from which the proper corrections were made. Check measurements were made over the whole line with a two hundred foot tape and wherever these measurements did not agree within the allowable error, they were repeated. This, however, did not occur often. The distance across all waters that could not be chained in the usual manner was ascertained by double triangulation, care being taken to use triangles such as would give the greatest degree of accuracy. In a few cases offsetting was used in preference to triangulation.

Astronomical observations were taken where and when possible and all bearings shown in my returns refer to the 79th Meridian. The weather conditions, nearly all season, were very bad for taking observations and as I was often obliged to camp some distance from the actual work, I did not get as many observations as I usually do, however, the bearings between observations, in all cases, checked quite closely.

Several magnetic observations were also taken, the records of which I am forwarding along with my other returns.

Levels and check levels were carried along the entire line. I was fortunate in getting the services of a very reliable man for this part of the work, in the person of Capt. K. M. Evans. I was unable to get a definite bench mark, from which to commence levelling and so was obliged to carry on, using an assumed datum. Later, however, the Topographical Survey of Canada ran a line of levels and ascertained the true elevation of my starting point. Allowing this correction, the levels closed at the south end of the survey on another bench

mark established by the Topographical Survey, very closely. I also had a good closing where the line crosses the Canadian National Railway in the Township of Bethune. The Geodetic Survey of Canada has established bench marks along this branch of the railway. Owing to the ruggedness of the country, levelling was an arduous task. It was a common thing to have the plus and minus readings amount to seven or eight hundred feet in a mile. More actual work was required to level an average mile of this country than would be required to run eight or nine miles in a level country. Bench marks were established on trees about every mile along the line as well as noting the elevations of all iron posts, rock posts and wooden posts.

The aerial photographs with which I was supplied were of much assistance in ascertaining the best routes along which to move.

Care was taken to open out the line extra wide near the shores of lakes and at such other prominent points as might show on an aerial photograph. Part of the line was run prior to taking the photographs with which I was supplied and it can be identified on these photographs quite clearly, to exactly as far as it was run on the date on which they were taken, and I feel satisfied that it will show clearly on any aerial pictures taken for some time to come. For the benefit of the Topographical Survey, I have marked the position of the line at such points as I could definitely locate it on the pictures.

The trees along the line were blazed in the usual manner, that is to say, on the side facing the line and on the two adjacent sides.

There is no area of any size in the vicinity of the line that could be classed as fit for agricultural purposes. The country is particularly hilly, with hills ranging to a height of five hundred feet. Many of these are rocky and in no place is the rock far below the surface.

Much of the timber, which consists chiefly of yellow birch, maple and hemlock with a scattering of balsam, spruce, cedar, iron-wood and beech, has been taken out, particularly north of the townships of Butt and Proudfoot. In these townships as well as in parts of Bethune and McCraney there is a good stand of hardwood of very good quality. The red and white pine was taken out many years ago, but the odd one here and there that was missed, still stands.

The most important lakes met with were Kioshkoqui, Manitou and Tea Lake. These are noted for trout fishing and their scenic attraction. Many tourists visit these lakes each summer. The other lakes along the line are comparatively small and of little importance. The water in many of these has been raised for lumbering purposes. The streams also are small and of little use as canoe routes as they are nearly all shallow and full of rocks. The East River is a good sized stream. This as well as the Maganatawan River has been dammed and there is much drowned land along their shores.

Throughout the whole area traversed very little evidence of game was seen. This at one time, was a noted country for its red deer but they are very scarce now, in fact there was more signs of moose than deer and in some places they seem to be fairly numerous. Beaver are almost extinct. Nearly all the waters show signs of where these industrious animals once lived. The smaller game is also scarce. The chief fish in the country is trout; both the lake and brook varieties are said to be plentiful, though I did not have much opportunity to prove this statement.

There are no water powers in the vicinity of this line.

The rock formation is granite, and no economic minerals were discovered.

Appendix No. 24

Extract from report and field notes of the survey of Township Outlines in the District of Nipissing, by E. W. Neelands, O.L.S., 1928.

GEOLOGICAL FORMATION

The formation for the most part consists of gneiss or granite gneiss in ridges with strike 5° E to 25° E, abrupt on the west side and sloping east. On the second base line both east and west of the first meridian conglomerate boulders indicated the presence of that formation at no great distance though none in place was seen. Between Diamond and Blue Lakes a large outcrop of white quartz with black mica was noted beside the logging road while high hills one mile south of the S. E. corner of McAuslan township are of the same formation. The Gneiss is very micaceous and contains evidence of considerable iron between Diver and Clear Lake.

WATER POWER AND CANOE ROUTES

Although the Ottertail has a fall of approximately 1,000 feet between the railway and Lake Temiskaming the storage facilities and discharge are not sufficient to make any development at the present time attractive.

Information re approximate locations of lakes was obtained from lumbermen or fire rangers. Improvements on this river make it fairly easy for canoes at present, but they are rapidly breaking up. Improvements below McKenzie Lake near the Railway makes an unbroken canoe route to the end of Snowshoe Lake.

The canoe route from Temagami to MacDonald Lake is broken only by five small portages and now used to a considerable extent by tourists.

TIMBER

The only mature pine of importance remaining is in the townships of Eldridge and Hartle and shown as closely as possible from personal observation and from information obtained from lumber foremen or timber cruisers.

In the Eastern townships several stands of middle aged jackpine were noted as shown on timber plan while the timbered section along the old Sarnia and Cleveland logging road has rapidly grown up with mixed timber and comparatively little undergrowth.

The remaining area, that has not been timbered recently is being naturally re-forested.

No marks of recent fires were noted.

SOIL

No agricultural land of importance was noted during the entire survey.

Appendix No. 25

Extract from report and field notes of the traverse of Kamiskotia River, Districts of Sudbury, Temiskaming and Cochrane, by A. Gillies, O.L.S., 1928.

We began the Traverse Survey of Kenogaming Lake on the morning of July 22nd. My party consisted of seven men, and we had three seventeen foot canoes and one outboard motor. The motor was only used in going to and from work and in moving camp. The black flies and mosquitoes were at their height and the season was very wet, in fact it rained part of nearly every day

we were on the survey. The lake surveys were accomplished without any difficulty, but there were long stretches of the river which were difficult to survey on account of rapids, log jams, swift water and no portages. We waded the river for miles in these parts, letting our canoes down with ropes, cutting out log jams, etc.

The Water Power sites along these Rivers are not very important on account of the narrow drainage area and small average flow of water. Between Kenogaming and Akweskwa Lakes there is a series of rapids and chutes over half a mile in length and having a total head of forty-five feet. This might be utilized by building a dam and flume and making Kenogaming Lake a storage basin. Between Beaucage and Opishingquaquaya Lakes there is a very good site for a Power Plant having a head of thirty-eight feet and favourable location for Dam, Power House and Flume. Between Stations 194 and 204 there is a total head of twenty-eight feet but this does not appear to be a very economical site for a Power Plant. Between Stations 214 and 217 is the most favourable location and is already staked as a Power Reserve. None of the other series of rapids appear to be of any considerable value as Power sites.

We took observations on Polaris practically every evening that it was possible to see the stars, but from August 15th to 23rd, it was impossible to obtain an observation. Taking the East boundary of the Township of Robb as Astronomic North, my bearings by account were only out one minute at this point.

I tied in all surveyed lines during the progress of the survey, except on the North boundary of the Township of Robb, where we were not able to pick up and follow the lines, as this part had been burned clean and grown up with second growth.

Appendix No. 26

Extract from report and field notes of the survey of the Township Outlines of Struthers, Kilpatrick and Travers, with Traverse of Lakes and Streams, District of Sudbury and Manitoulin, by J. R. Gill, O.L.S., 1928.

Party left Sudbury on July 19th for Burwash Station on the Canadian National Railway. From this point party proceeded by canoe down the Wanapitei River for a distance of about eight miles and thence across a portage of about two miles to Gainy Lake.

At this point traverse work was started as from this lake routes lead to Panache Lake, Collins' Inlet and the Township of Rutherford. Important lakes and streams with connecting portages on these routes were traversed. As well as this work some of the boundaries of the Townships of Struthers, Kilpatrick and Travers were run.

Throughout this area lumbering has been carried on for about fifty years; the original pine and spruce has been removed. In recent years a great deal the second growth pine, etc., has been cut and hardwood is being cut at the present time. Practically all of the township of Travers has been burned over and consequently, there is very little timber remaining.

The rock formation in the Eastern part of this area is all Granite and Gneiss. In the Western part the rock is Quartzite. No indication of valuable mineral was noted, although considerable local attraction to the compass needle was noted, especially along Gainy and Hunter Lakes.

Practically all the streams have been improved for lumbering purposes but many of the old dams etc., are now in a poor condition. There are numerous falls on these streams but the flow is hardly sufficient to make them valuable for water power development. The Quartzite area mentioned is very rough with numerous high hills. The Ontario Forestry Branch have a tower on one hill known as Silver Mountain from which a wide area can be viewed.

A considerable number of tourists visit this region by way of Collins Inlet and from Lake Panache. There is good fishing in most of the lakes and a great number of deer were seen during the period the party was on traverse work.

Appendix No. 27

Extract from Traverse of Lakes and Rivers west of the Township of Carlyle in the District of Manitoulin, by T. J. Patten, O.L.S., 1928.

With the exception of the narrow river sections, and the few small tracts marked "flooded" or "flooded marsh", there is very little of the shore traversed which is not suitable for summer resort purposes; though in a considerable portion the timber is yet rather too small to make the shores attractive.

The country generally is rocky and broken, with occasional small patches of arable land, mostly clay, between the ridges. There are scarcely any large tracts of arable land, except a narrow strip along the rivers in places.

Several ridges of quartzite, 300 to 500 feet high, were observed.

In the valley containing Leech and Harwood Lakes, and smaller lakes to the east, the country rock is very favourable for the prospecting of mineral.

A matter of very great importance is the repair, or re-building, of the dam where Kirk Creek flows out of Long Lake. The dam was built many years ago by the lumbermen. If it were to go out it would greatly mar the attractions of Long Lake in making the shores very unsightly. And it would appear that if the water should revert to its original level there would be three lakes instead of the very attractive one at present, and would probably affect the lake badly as a canoe route.

It is on a main route from McGregor Bay and Baie Fine to Lake Panache.

Appendix No. 28

Extract from a stadia Traverse of parts of Michipicoten River, Magpie River, Whitefish River, Shikwamka River, District of Algoma, by C. R. Kenny, O.L.S., 1929.

MAGPIE RIVER

This river has its source in Esnagama Lake and crosses the Main Line of the Canadian Pacific Railway at a point about six miles west of Franz Ontario. It flows in a south westerly direction and reaches the Michipicoten River in a total "river distance" of about 75 miles with a total descent of 526 feet. The water shed comprises an area of about 820 square miles to a point near its mouth called "Magpie Falls and Canyon."

The description of the river commences at the centre line of the Canadian Pacific Railway bridge, 8 chains westerly from mile 90. Elevations are based on bridge rail level as 1156, and top of spillway section of Esnagama Lake dam as

1126. This dam is 3.99 chains below railway bridge. The dam sill of lower two sluice gates is at Elevation 1117. From this point to Jean Falls, four miles down stream, the current is moderate and lake-like, with easy curves. Below Jean Falls the river for a distance of about 5 miles due south as the crow flies is very crooked with a fair depth of fast water, traversing through banks of sand and gravel. From here the river turns sharply west and has several lake-like expansions of fairly quiet water for about four miles to the head of a rapid where there is a fall of 21 feet in a distance of 30 chains. From the foot of these rapids, a distance of 30 chains, is the head of another rapid 20 chains in length with a fall of 10 feet. There apparently is no site suitable for a dam at these two rapids. Below these two rapids the river turns and runs nearly south to the south westerly angle of Tp. 28, R. 27. and in this distance there is a drop of about 26 feet. From this point the river runs east, south and west and crosses the west limit of Tp. 29, R. 26 near the 2 mile post and flows generally south to the head of Cedar Falls, which has a drop of 19 feet. The flow in this section of the river is moderate with usually high banks of gravel and sand. From the foot of Cedar Falls, the river flows in a general south westerly direction and crosses the north limit of Tp. 29, R. 25 near the 31 mile post, and continues 2 miles to the Algoma Central and Hudson's Bay Railway bridge, of the Magpie Mine Branch. In this stretch the river is unusually wide in places with easy curves and current. From this point the river runs south westerly and south easterly for a distance of about 5 miles with very little fall to the north limit of Tp. 29, R. 24. About a half a mile below this is the commencement of a series of rapids, continuing down with a total fall of 90 feet in a distance of one and a half miles previous to the construction of Steep Hill Falls dam. A dam of the Ambursen type has been constructed at this point with crest at Ele. 958. The development consists of steel penstock line with surge tank and connections to two turbines developing about 1300 horse power each. It is possible to get increased power at Steep Hill Falls by raising the crest of the dam. Below the power house the river forms a pool at the outlet of which is the metering section of the Dept. of the Interior. From below Steep Hill Falls the river flows south and west for about four miles to the west limit of Tp. 29, R. 24 and westerly for a mile and a half and southerly for a mile and a half to the south limit of Tp. 30, R. 24. Thence southerly for about a mile and a half to the Magpie River bridge of the Michipicoten Division, Algoma Central and Hudson Bay Railway. Water level here is Ele. 847. In this section of the river the banks are sand and gravel and are high, with occasional rock outcrops. From the foot of Steep Hill Falls to the railway bridge crossing the fall is 113 feet, well distributed throughout the length. There does not appear to be a good dam site in this part of the river. Below the bridge the river is winding between cut banks of sand and gravel of about 20 feet high, for a distance of about four and a half miles to the head of Magpie Falls and Canyon (Ele. 803). At this point there occurs a fall of about 67 feet in four chains, and below this the banks of the river are narrow and high and termed canyon for a distance of 15 chains with a further drop in this distance of about 6 feet. Ten chains below the canyon is the foot of a rapid (Ele. 730). Thirty chains below this point and including a fall of 3 feet is the head of a rapid 20 chains in length with a fall of 5 feet. About 50 chains down stream from this point is the head of "3rd Falls" (Ele. 720) with a drop of 49 feet. Ten chains below 3rd Falls is "2nd Falls" with a height of 38 feet. Ten chains below this again is "1st Falls" or Mission Falls with a drop of 29 feet; the foot of this falls is about Lake Superior water level. Twenty chains below foot of 1st Falls the river joins the Michipicoten River at a mile above its mouth.

Along the river banks and in its immediate vicinity, merchantable timber, such as spruce, balsam, jack pine, birch and cedar is in scattered areas and on the whole the stands are only fair. The greater part of the river section consists of second and young growth trees. The country about the several railway crossings mentioned in above report has been fire swept and left almost barren, and since grown up with small birch and poplar.

SHIKWAMKWA RIVER

The description of this river commences in Tp. 24, R. 25 from about two miles up stream from Dalton Mills. A mile above the mills the river is crossed by a railway spur connecting the Main Line of the Canadian Pacific Railway, above which point the river is swift and narrow, traversing through high banks of sand and gravel. Below the railway spur crossing is Shikwamkwa Lake which is about 7 miles in length. This lake is navigable for large launches which are being extensively used in connection with logging operations. The water of the lake is clear and the banks are generally high with here and there high hills of sandy soil with rock outcrops.

A short distance below the foot of Shikwamkwa Lake is Nicholson's dam which when closed backs the water up a maximum height of 10 feet (Ele. 1104). Below the lake the river runs south westerly for a distance of seven miles to a point called Jane Falls, the current in this stretch of river is fast with a descent of 55 feet and traversing through banks of gravel and sand of from 4 to 20 feet high. At Jane Falls there is a drop of 15 feet. Below Jane Falls the river runs generally south west for about 8 miles to the head of Dona Falls which is about 10 chains east of the east limit of Tp. 27, R. 23. There is about 26 feet fall in this section and the banks of the river are from 5 to 15 feet in height above this water stage, with occasional rock outcrops.

Dona Falls consists of a series of falls and rapids over a distance of half a mile, with a total drop of 21 feet. Fifteen chains below this again is a canyon with a fall of 13 feet. Below the canyon for a distance of about five and a half miles the current is swift with several rapids, and having a total fall of about 20 feet to the junction with the Whitefish River, the combined streams forming the Michipicoten River. The survey continues two miles down stream to the crossing of the Main Line of the Algoma Central and Hudson Bay Railway, 12.52 chains north from mile 152. In this last stretch of river the current is swift and in many places rapid. The banks are usually high, from 5 to 20 feet made up of gravel and sand.

In respect to timber along this river I observe that a considerable portion of the country has been lumbered for pulp wood and railway ties, and portions of the cut over land have been burned, some of this area showing a thrifty growth of young timber; but there still remains large areas of merchantable timber consisting of spruce, balsam, birch, jack pine, and cedar.

WHITEFISH RIVER AND LAKE

This river commences at the foot of Manitowik Lake and flows in a general south westerly direction for a distance of about 13 miles, with a total fall of 56 feet (Ele. 978 to Ele. 922).

The Whitefish and Shikwamkwa Rivers join one another, forming the Michipicoten River. This connection takes place at a point about two miles up the Michipicoten River from the crossing of the Main Line of the Algoma Central and Hudson Bay Railway.

From the mouth up stream for a distance of a mile is Cat Falls with a drop of 33 feet. From the head of Cat Falls up stream, a distance of about 4 miles is the foot of Whitefish Lake. At this point the river is narrow having a width of about 2 chains. Here a dam has been constructed for use on controlling water level in connection with driving timber. The river from the mouth to the dam has an average width of about 6 chains. The bed of the stream is principally gravel, and in a few places the water is shallow. The banks are of sand and of good height, from 5 to 20 feet. The timber consists chiefly of second growth spruce, balsam, birch, poplar and cedar.

Whitefish Lake has a length of about 5 miles and an average width of 50 chains. The water is clear and of good depth and suitable for navigating boats and launches. The banks of the lake are usually high and close to the lake shore the country appears rough and hilly with rock exposures. The soil is stoney and sandy, timbered with chiefly second growth spruce, balsam, birch, poplar and cedar.

From the head of Whitefish Lake the river continues for a distance of about 3 miles to the foot of Manitowik Lake. The current in this section of the river is of moderate flow and traverses through banks of sand from 5 to 25 feet in height, timbered with chiefly second growth spruce, balsam, birch, poplar, jack pine and cedar.

MICHIPICOTEN RIVER

The Michipicoten River commences at the confluence of the Whitefish and Shikwamkwa Rivers, and flows in a general south-westerly direction for a "river distance" of 25 miles, and empties into Lake Superior, and has a total fall of about 320 feet.

The water shed of the river to a point called High Falls, 13 miles distant up stream from its mouth, comprises an area of about 1,900 square miles.

From where the river commences, it runs in a south-westerly direction for a distance of about 2 miles, where it reaches the crossing of the Main Line of the Algoma Central and Hudson Bay Railway. From thence it flows in a westerly course for a distance of 12 miles to High Falls. Throughout this distance the current is swift, and in a few places rapid, the largest of these occurring about one and a half miles above High Falls, and having a fall of about 6 feet in a distance of three-quarters of a mile. The river banks are of sand and gravel, having a height of from 4 to 30 feet. The timber consists of birch, balsam, spruce, poplar and cedar of merchantable value, interspersed with areas of burned country carrying young growth trees.

The most important water power site on this river is at High Falls. Some years ago a development was constructed with head of 125 feet, and one unit of about 5,000 H. P. This development has been superseded by one at present under construction designed to develop 10,000 H. P. with one unit, and with provision for another unit of similar capacity. A transmission line is in the course of construction with double wood poles and wood cross arm. This transmission line leads to the City of Sault St. Marie, a distance of 120 miles.

The flow of this river is capable of being regulated to a large extent (possibly 30,000 H. P.) on a account of the number of large lakes, including Wabatongushi, Jackfish, Manitowik, Whitefish, Windermere, Kwakwuskwanda, Shakashi, Kinniwabi, Anjigami, and Dog. It is doubtful if much storage can be obtained in Dog Lake on account of the grade of the Canadian Pacific Railway.

Below High Falls there is a drop of 110 feet to Lake Superior, 80 feet of which occurs in a distance of about two and a half miles from the foot of the

falls. In the first mile the drop is about 75 feet, and in the vicinity of Station 924 (see plan) there appears to be a suitable site for a further development of water power. From this point to the mouth of the river the flow is swift, and traverses through high sandy and gravel banks of from 5 to 35 feet. The timber along the shores is scarce and consists of chiefly second and young growth.

Appendix No. 29

Extract from report and field notes of Survey of Base and Meridian Lines in the District of Kenora, by Speight & vanNostrand, O.L.S., 1928.

GENERAL FEATURES

The lines included in the instructions all lie close to the height of land between waters flowing to the Winnipeg River through the Lake of the Woods, and those flowing through Lac Seul. The result is that no considerable water power was noted, the streams all being small. The largest stream was the Gull River, which was crossed a number of times on the west and north boundaries of township number 20. There is a falls in the Gull River amounting to about twenty-five feet, a mile and a half east of the north-west corner of that township. Above the fall the river is navigable by canoe up to and through a short creek into Kay Lake, without a portage. Although we had no occasion to follow further up the stream, we understand that above Kay Lake, the river does not form a satisfactory canoe route. The initial supplies were, of course, taken in with the party to Manitou Lake. Stormy Lake can best be reached from the Canadian Pacific Railway through Long or Kawashegamuk Lake, and from thence there is a regular canoe route via Bending Lake, south to Rainy Lake, and another east to Ignace. The canoe route shown on the maps, leading south from Raleigh Station on the Canadian Pacific Railway, though feasible for light canoes, is little used, and not very satisfactory. A canoe route was followed through a series of small lakes from Kay Lake to Gull Lake and from thence to Loon Lake and Scotch River. Between Manitou Lake and the timber berth west of township number 22, the ground is very broken, and the line crossed a continuous succession of hills and lakes. The eastern part of our work, however, lies in somewhat flatter country, and we crossed a number of sand plains and muskegs of a mile or so in length.

TIMBER AND MINERALS

West of Stormy Lake, in Mile 27, we passed through a small belt of white pine. As the other pine in the vicinity of the lake has been cut, we presume that there were difficulties which prevented the ready removal of the timber. This was the only white pine seen. No red pine was noticed.

The forest from Nivens 6th meridian to Stormy Lake is, for the most part, about forty years old, and the timber is, generally speaking, not yet of a merchantable size. There are, however, small areas which have escaped the fire and contain saleable spruce, cedar, etc., Between mileage 18 and mileage 21, the new growth is almost entirely birch, and its appearance is quite exceptional in that regard.

From Stormy Lake eastward to the end of the base line at mile 48, the country has been fire swept, and the second growth is now about eighteen years old. What is apparently the same burn, was intersected by our meridian at

mile 4, and found to extend east to Gull Lake. The ground is now covered with windfall and a dense new growth of small jackpine, and it is most difficult to travel over the area. Between Gull Lake and Scotch Lake the timber is green. There is a mixed stand of spruce, jackpine, balsam and birch, containing good quality jackpine and pulpwood. This area is now being cut by the C. H. Greer Company of Port Arthur.

Little timber of value exists along the lines run east and west from the north-west angle of township No. 20. Along these lines are extensive sand plains covered with scrub jackpine.

The area adjoining Manitou Lake was staked for gold in the rush of 1897, and later much of it surveyed into mining locations. In the vicinity of mile 19 at Stormy Lake and around mile 44, the formation would also seem particularly to warrant prospecting; in fact, the rock throughout most of the area is much broken up by intrusions promising results to the prospector.

FISH AND GAME

Manitou Lake is being fished by Mr. C. Merrill of Wabigoon, lake trout being the principal catch. Stormy Lake is also fished commercially, though operations were not being carried on during the past season. The smaller lakes we found to be well stocked with lake trout, pike and pickerel.

Moose and deer are fairly plentiful, while bear are at present in more than average numbers.

Beaver had been numerous at one time, but are now scarce.

Few partridge were seen, though the breeding season seems to have been more favourable than the previous two seasons, and the hens had larger flocks of young.

Appendix No. 30

Extract from Report of Messrs. Speight & vanNostrand, O.L.S., resurvey part of the Fourth Meridian Line in the District of Kenora, April 9th, 1929.

GENERAL FEATURES

From our point of commencement to about mileage 96 the waters crossing the line flow to Lac Seul. North of this point, the line lies in the watershed of the Cat River. Flowing into Lac Seul are the waters of the Sturgeon, Vermilion and Root Rivers. Of these the Root River was the only one travelled for any distance by the party. This river has been for many years part of one of the main canoe routes leading to the mouth of the Albany, and the portages are consequently in excellent condition. The river itself has ample water for travel by canoe between Lac Seul and the point where the canoe route branches up the small creek leading to Root Portage. Even during the extreme low water experienced during the latter part of August, at the time when the party returned from the end of the line, there was no trouble with shallow water. We also travelled the Root River between the point where our line crossed it for the second time in the 92nd mile and the junction with the main canoe route from the Albany, and found four portages in this part. This section of the river is extremely crooked, and is shallow in spots.

The water of the creek flowing from Root Portage to Root River was very low when it was used by us, and considerable difficulty was experienced in traveling it, particularly for the first two miles or more upstream from the junction with the Root River.

The Cat River formed an excellent route between Lake St. Joseph and the unnamed lake crossed by us at mileage 121. The waterways and rapids are all shown clearly on the Lake St. Joseph sheet (provisional edition) of the Topographical Survey of Canada. There is only one minor criticism of this plan which we offer. The portage shown in the centre of the south-west quarter of square 60-274 of this sheet was on two separate occasions thought by members of our party to be indicated as to the north of the island, instead of to the south.

We could find no sign that the canoe route which apparently crosses our line at about mileage 129, is now used.

Tully Lake is drained by a creek flowing into the Vermilion River. We took some supplies up this creek but it is not travelled by the Indians. Access to the lake seems to be through a creek flowing north-west from near the north margin of the lake.

With the exception of a few miles to the south of the Root River, the area crossed by the line is rocky and broken. Immediately south of the Root River, however, there is a section of low land consisting of good clay soil.

The Hudson Bay Company maintains a post at Slate Rock Falls, on the Cat River, which, however, is occupied during the winter season only. The Hudson Bay Company post at Lynx Portage, on the Root River, shown on the Sioux Lookout sheet of the Topographical Survey of Canada, has been abandoned and is not now in use.

TIMBER

By far the greater part of the season's work was across country which had been burned over at various times within the past twenty-five or thirty years. Between mile 45 and mile 49 there is however, some excellent pulp wood and tie timber. There is another area between mile 53 and mile 56 which also contains pulp and tie timber, and from the Fourth Base Line northwards for ten miles, the timber is mature, and there is a good stand of spruce and jackpine. Outside of these three areas, there are only isolated patches which have escaped the fires. On our timber plan we have shown areas on which timber is less than thirty years old, by brown hatching, areas on which the timber is between thirty and sixty years old by a single green hatching, and areas on which the timber has reached merchantable size by double green hatching.

No commercial quantities of red or white pine were seen.

GEOLOGICAL FORMATION AND MINERALS

Immediately south of the Transcontinental Railway the line crosses an area exposing porphyry and schist. As is to be expected with an area immediately adjoining a railway, this seems to have received considerable attention from prospectors, but so far, we believe, with negative results.

In travelling the stream crossed by our line at about mile 100 we noticed along the banks some exposures of slate, though nothing but granite was seen on the line. Again, in the 113th mile, we noted slate rock and granite schist. With these exceptions the whole line crossed country in which we saw exposures of granitic rock only. No definite evidence of economic minerals was noted by us during the course of the season's work.

PHOTOGRAPHS

Before going into the field we were supplied through your Department, with a number of photographs taken of areas crossed by our line. We have indicated on these prints such points as we were able to recognize, and are forwarding them to you with our returns.

FISH AND GAME

In general, the fish caught by the members of the party during the summer, were pike and pickerel. In Tully Lake, however, some fine lake trout were obtained.

This lake is also said to contain whitefish.

Deer were fairly plentiful, and some signs of moose were seen.

Beaver had been numerous at one time, but now seemed to be practically extinct in this section.

Partridge were rather scarce but it was the general opinion that more were seen than had been noted during either of the previous two summers.

Appendix No. 31

Extract from Report and Field Notes of the survey of Base and Meridian Lines in the Patricia portion of the District of Kenora, surveyed by Phillips & Benner, Ontario Land Surveyors, 1929.

In the vicinity of Shuniah Lake evidence of mining claims having been staked as shown on map supplied by the Department were seen, but we did not see any survey lines nor could we learn that any claims had been surveyed; also in the Pickle Lake area evidences of staking were seen, but no surveyed claims were crossed.

Notes of rock formation where visible are shown in the field notes, but information of this subject will have been thoroughly covered by geological parties sent out by the Department of Mines.

On Pickle Lake the Ontario Forestry Branch has a base on an island in the lake and on the East end the N. A. M. E. Co. have a warehouse. There is also a restaurant and store on the east end of the lake which we believe is Pickle Lake headquarters for the Western Canada Airways.

The country in general is low and flat with large areas of muskeg and swamp with small islands and ridges of either rock, sand or gravel, almost on the same level as the surrounding country; these muskegs and swamp appear to remain frozen the greater part of the year. The largest areas of high land appear to be generally around the lakes.

The rivers and lakes are generally shallow with a bottom like liquid muskeg through which it is sometimes almost impossible to force a canoe. Rocks and large boulders are also of frequent occurrence in the beds of these lakes and streams making navigation with canoes difficult and dangerous. Owing to the character of the country there are almost no falls in the rivers of any importance, the drop generally taking place in series of rapids. The only fall of any extent seen was on the river flowing into the Gitchie about eight (8) miles due west from the six mile post on the meridian. At this point a drop of about eighteen feet occurs in a series of falls in a distance of about sixteen (16) chains.

The timber met with was mostly spruce and this varies from the stunted variety in the muskegs to trees up to twelve (12) inches in diameter and over on the drier ground. Owing to the irregular nature of the areas of merchantable timber it is impossible to form an accurate estimate of the percentage of the spruce areas containing merchantable timber, but we would say at a rough estimate about fifteen per cent. or twenty per cent. The jack pine is nearly all too small to be of commercial value as tie timber. The largest areas of jack pine of merchantable size being on the base line between the lake crossed in the sixty-eighth (68th) mile and the lake in the seventieth (70th) mile and on the Meridian Line north of the twenty-first (21st) mile, also on the Base Line east of Kapkichegimaga Lake there is a certain amount of jack pine of merchantable size. Balsam, birch and poplar occur but only in isolated places.

Burnt areas occur as follows:—On the Meridian between the 9th and 10th mile, burnt some years ago; also between 19th and 20th mile, local fire probably two or three years ago, and on the last mile of the meridian, some time since 1919 the timber has been burnt as far as can be seen in all directions except south. On the Base Line between the eighth (8th) mile post O.L.S. Dobie's meridian and Kapkichegimaga Lake the high ground appears to have been burnt several times, probably the last time about twenty years ago. The remainder of the line passes through green timber. Off the line an area has been burnt this year around the lake west of the eleventh mile post on the Meridian.

Water routes used with connecting portages are indicated on the map with the exception of one passing through Wright Lake to Kawinogans Lake. An attempt was made to use the southerly branch of the river which enters the lake due south of Mileage $52\frac{1}{2}$ (fifty-two and a half) but this route was found impossible. It was also found that the lake in which the fifty-six (56) mile point came has its outlets as shown and not as shown on the map by the Topographical survey of Canada.

Game of any kind appears to be very scarce, only two or three moose and two bears being seen during the whole course of the survey. Fish, including pike and pickerel, are fairly plentiful in most of the lakes.

Appendix No. 32

Extract from a Traverse of the Albany River and Opichuan River from Lake St. Joseph to the Ogoki River, by James S. Dobie, O.L.S., 1929.

The survey commenced where the south shore of the Albany River is intersected by the meridian line run by James Benner, O.L.S. in 1923, a short distance east of Lake St. Joseph. The Albany River was surveyed as far as the mouth of the Opichuan River. The survey was then carried up the Opichuan River, through Kagianagami Lake and Mahamo Lake, and up the Ogoki River to connect with the survey of the Ogoki River made by myself in 1926. The survey was also carried up into Eabamet Lake which was traversed with the exception of the shore of the Fort Hope Indian Reserve which had been traversed when this Indian Reserve was surveyed in 1910. The corners of the Fort Hope Indian Reserve were located and connected with the survey. The Albany River between Lake St. Joseph and Fort Hope flows through several large lake expansions and outline traverses of both sides of these lakes were made.

The method of conducting the survey was by transit and stadia as described in previous years. Every effort was made to reduce the errors in reading dis-

tances to as near an absolute minimum as possible, and the use of a transit with a telescope powerful enough to permit of observations being taken on polaris at any hour of the day made it possible to almost eliminate azimuth errors. Frequent observations for azimuth were taken and the details of these observations were recorded on the forms supplied by your Department for this purpose.

On account of the manner in which mapping from aerial photographs has been developed during the past few years, and as this method of mapping will be applied to the Albany River and to the territory adjacent to the survey, it was not considered advisable to go into great detail in locating the shore line. The traverse of numerous islands and of many deep bays was dispensed with as the details of these features can be plotted later from the aerial photographs. The plans of the survey which have already been forwarded to your Department give a sufficiently accurate representation of the main physical features for present requirements.

The whole survey was carried out so as to form part of the ground control necessary for plotting aerial photographs for a considerable distance on either side of the traverse, and particular attention was paid to accurately locating small islands, sharp points and other physical features which it was thought could be easily identified on the photographs.

Posts were planted at intervals along the shore and marked consecutively as in previous years. Stone mounds were built around these posts, and bearing trees were marked and recorded in the field notes wherever suitable trees were near enough at hand. A large number of posts however have no bearing trees as very often the most suitable place for a post was on a rocky point comparatively bare of timber. On points such as this there is practically no danger of the posts being destroyed by fire. In a very few cases where it was not possible to secure stones for mounds, and where the ground is too low and wet to permit of suitable pits being dug, a large sound green cedar or tamarac tree was squared and marked instead of a post. This was only done in a very few cases and then only when it was considered that the marked tree had a better chance of remaining as a monument than a post unmarked by a stone mound.

Twelve metal posts were planted at intervals and marked with the same number as the wooden post planted alongside them. Most of these metal posts are located near waterfalls on the river where they can be used as bench-marks. The elevation of every metal post was obtained and marked on the plan.

The Albany River is one of the largest rivers in Ontario, and the portion surveyed consists of a series of river stretches connecting a number of lake expansions. Between Lake St. Joseph and Fort Hope on Eabamet Lake there are thirteen rapids and falls at which portages are necessary. In many places the river flows with a rapid current, and there are numerous rapids at which there are no portages cut out, and where care is required in navigating particularly with small or loaded canoes.

Levels were taken on the river as the survey progressed, and the elevations thus obtained are shown on the plan wherever there is a fall of any magnitude. These elevations are approximately correct only, as actual levels were only taken where there is a considerable drop in the river. Along many stretches of the river the change in elevation was estimated. It is felt, however, that the elevations obtained in this way are sufficiently accurate for present purposes as the difference in elevation is accurately shown at all points where water power developments will occur in the future.

There are several points where water powers of considerable magnitude can be developed. At Smooth Stony Portage a little over eighteen miles below

Lake St. Joseph, there is a fall of 34 feet. Detailed investigation may show that it may be possible to dam the river here so as to raise the water to the level of Lake St. Joseph or possibly higher, which would increase the head to 54 feet or more. About four miles below Smooth Stony Portage there is a series of falls and rapids called Kagami, at which three portages are made. The river here falls 65 feet in a little over a mile and an important power could be developed.

In connection with possible power developments at both Smooth Stony Portage and Kagami, it should be pointed out that the Albany River divides at a small lake about five miles above Smooth Stony Portage. The survey follows the northern channel but the south channel is a large stream and there is a very heavy rapid where it rejoins the Albany River just below Kagami. As to what effect this southern channel may have on possible power developments at these points can only be determined by a detailed survey. No investigation was made of this channel excepting to mark the points where it left and rejoined the main river.

About twenty-two miles below Kagami there commences a series of rapids which extends for about six miles, but the heavier rapids are all towards the upper end. There are two portages in this section, and there is one long portage which is made going up stream which cuts off the two portages just mentioned, and also a number of rapids which are rather difficult to get up. The power possibilities in this series of rapids are uncertain but it is quite probable that a detailed power survey would show that at some site in the stretch of river cut off by the long portage referred to above, a considerable portion of the fall in these rapids could be concentrated and an important power developed.

For about 21 miles below this series of rapids the Albany River flows with a sluggish current except in a few places where there are short, flat rapids of no special significance. In this stretch the Miskew and the Shabushkwia Rivers enter from the south, and the Etowamami River comes in from the north. A little over two miles below the mouth of the Shabushkwia River, the Albany River takes a drop of 22 feet at Greenbush portage. Two and a half miles down stream there is an abrupt drop of 23 feet and the river narrows to about a chain wide. High hills appear on both sides of the river a short distance back from the water. This is followed about two miles further down stream by another drop of about nine feet which brings the river almost to the level of Miminiska Lake, which is about eight miles further down stream. The river between these falls is very fast and there are several short rapids with a drop of about a foot each. The total fall from above Greenbush portage to Miminiska Lake is about 66 feet, and the amount of power to be developed here is very large.

Between Miminiska and Petawanga Lakes there is a short rapid, then an abrupt fall of about 10 feet followed by a rough rapid about half a mile long with a drop of 18 feet. The total fall from Miminiska to Petawanga Lake is 32 feet and a considerable power could be developed here. It is possible that the lower one of the three falls above Miminiska Lake could be combined with the falls between Miminiska Lake and Petawanga Lake. The falls between these lakes is passed by a short portage on the east bank of the river, and the long rapids below the falls is run with light or partially loaded canoes. There is, however, a good portage about 35 chains long from Miminiska Lake to a point on the river below the rapids by which all these rapids and falls may be avoided.

Immediately below Petawanga Lake there is a rapids with a fall of 20 feet. The river here is divided by an island and the portage crosses the island from the northerly channel to the southerly one. Six miles lower down there is

another rapids with a drop of 18 feet and here again the river is divided by an island. A portage which passes the worst part of the rapids is on the south side of the island. The power possibilities at these rapids are important provided the cost of constructing the necessary dams, etc., is not too great.

There are no further rapids on the Albany River until Frenchman's rapids is reached. This is a rough rapid with a drop of about eight feet, and is situated about 18 miles down stream from where the outlet of Eabamet Lake enters the Albany River.

The Opichuan is a comparatively small stream draining a number of lakes of which Kagianagami Lake is the largest. There are a number of rapids on this stream at some of which small powers could be developed. The total fall from Kagianagami Lake to the Albany River is 157 feet.

The Albany River flows through a rolling country which generally speaking appears low and flat, as seen from the river. However, as one goes back into the woods the ground generally becomes higher, and when one gets on an eminence from which a view can be obtained, rolling hills appear in the distance. The shores are generally low and stony with occasional rock outcrops, and here and there stretches of sand and gravel. For some distance before reaching Miminiska Lake, rolling hills could be seen rising to a height of 200 to 300 feet above the river.

There is considerable timber of the varieties peculiar to this country, spruce, jack-pine, white birch, poplar and balsam being fairly plentiful and of good quality. A few scrubby ash and elm trees were seen on the low ground where the Albany River enters Miminiska Lake. Cedar is fairly plentiful close to the shore of some of the lakes, but the quality of the timber is poor. There are very large areas which have been burnt over at different times in the past and the greater part of the timber observed from the river during the season is second growth of varying ages, depending upon when the fire destroyed the original timber. Notes were made in the field notes on practically every traverse course as to the kind and quality of timber seen along the shore, as well as any other information which it was thought might be of interest, and these notes have been placed on the plan which forms part of the returns of the survey.

The agricultural possibilities of the country seen during the survey are practically nil, very few tracts of arable land being seen which would be large enough to make more than an ordinary garden.

The rock exposures along the upper portion of the Albany River are almost invariably granite and gneiss, with the exception of a small area of dark-green schist at the outlet of Lake St. Joseph. There are some prominent granite hills close to the river below Elbow Lake. About 20 miles above Miminiska Lake there are some small exposures of dark-green rock with a schistose structure. The rock exposures here are not plentiful but all along the river in this locality the magnetic local attraction is very pronounced. Hills rising to a height of 200 to 300 feet above the river could be seen about a mile back, and it was thought that there would probably be some rock exposures on these hills. Some prospectors, who were met on the river, however, stated that these hills are almost entirely composed of sand and gravel. The series of falls below Greenbush Portage are all over these schistose rocks, but below the last of these falls the river banks are very low and marshy, and in many cases stakes had to be driven into the ground to make a steady support for the transit. Along the shores of Miminiska Lake there are some exposures of these schistose rocks, and at one place on the north side of the eastern part of this lake an exposure of lean-banded magnetic iron ore was seen accompanied by strong local magnetic attraction. It is probable that this band of schistose rocks extends through to Fort Hope,

and there would appear to be some good prospecting ground in this locality, although the heavy overburden which appears to be spread over the whole country will make prospecting difficult.

Below Petawanga Lake granite and gneiss appear again, and these rocks predominated throughout the rest of the survey excepting near Frenchman's Rapids where another area of schistose rock occurs.

North of the trading posts of the Hudson's Bay Company, and Revillon Freres at Fort Hope on Eabamet Lake, there has been considerable mining activity during the past year and a number of mining claims have been staked. Mining operations of considerable magnitude have been carried on within the past few months. The corner post of one of these mining claims was connected with the survey, as also were the corners of the tracts of land owned and occupied by the Hudson's Bay Company and Revillon Freres at Fort Hope.

A very little game was seen during the season. An occasional deer and moose was observed but these animals do not appear to be plentiful. Pike, pickerel, whitefish and sturgeon are fairly plentiful in the Albany River and the various lake expansions. At most of the rapids speckled trout of good size were caught. In the rapids on the Opichuan River large speckled trout are very plentiful and large lake trout are said to be plentiful in Kagianagami Lake.

The magnetic variation in the granite areas varies from about one degree east near where the survey started, to two degrees, fifty minutes west on the Opichuan River. The amount of local attraction is nowhere very steady, and in the schist areas around Miminiska and Petawanga Lakes the local attraction is most pronounced over large areas. The two small booklets supplied by the Topographical Survey at Ottawa for recording local magnetic bearings were filled up with magnetic records and are returned with the other returns for the survey.

REPORT
OF THE
MINISTER OF LANDS AND FORESTS
ONTARIO
1929

Part II—Forestry Branch

Appendix No. 33

I.—FOREST FIRE PROTECTION

(1) *Legislation*

During the year Orders-in-Council were passed affecting the boundaries of the Fire Districts, "Travel Permit" areas and the conditions under which fire might be used out of doors in some districts for cooking or obtaining warmth.

These Orders-in-Council were as follows:—

"Copy of an Order-in-Council approved by The Honourable the Lieutenant-Governor dated the 30th day of April, A.D. 1929.

Upon the recommendation of the Honourable the Minister of Lands and Forests, the Committee of Council advise that pursuant to the provisions of section 2, subsection 3, chapter 291, R.S.O. 1927, the following areas be declared to be no longer within the Fire District, these areas having largely been alienated from the Crown.

District of Parry Sound

The townships of Chapman, Strong, Ryerson, Armour, McMurrich and Perry.

District of Muskoka

The townships of Stisted, Chaffey, Watt, Stephenson, Brunel, Monck, Macaulay, Muskoka, Draper, Morrison and Ryde.

County of Simcoe

The township of North Orillia and Matchedash township lots 1 to 9 in concessions 1 to 7.

County of Ontario

The township of Rama.

County of Peterborough

Harvey township, concession 9—lots 7 to 15 inclusive; concession 10—lots 5 to 15 inclusive; concession 11—lots 1 to 15 inclusive; concessions 12, 13, 14, 15, 16, 17 and 18—all lots or parts of lots south of Bald and Pigeon Lakes.

County of Hastings

The township of Elzevir.

County of Lennox and Addington

The township of Kaladar.

County of Frontenac

The townships of Kennebec, Olden and Oso.

County of Lanark

The townships of Sherbrooke South and Sherbrooke North."

"Copy of an Order-in-Council, approved by The Honourable the Lieutenant-Governor, dated the 14th day of August, A.D. 1929.

Upon the recommendation of the Honourable the Minister of Lands and Forests, the Committee of Council advise that pursuant to the provisions of section 21, chapter 291, R.S.O. 1927, the following areas be declared "Travel Permit" areas, the same being in the public interest.

(1) The township of Hammell and all that part of the townships of Stewart, Osborne, LaSalle and Gooderham lying west of the Timiskaming and Northern Ontario Railway.

(2) The townships of 137, 138, 139, 151, 157, 163, 169, 176, 182, N $\frac{1}{2}$ Gould, 188, Otter, Morin and McMahan.

(3) All that area lying within the following boundaries excepting only the north half of the township of Chapleau, the south half of the township of Panet and the south-west quarter of the township of Cochrane.

Commencing at the south-east angle of the township of Sheppard, thence westerly along the southerly boundaries of the townships of Sheppard, McConnell, Telfer, Fraleck and Creelman to the south-east angle of the township of Roberts; thence southerly along the easterly boundaries of the townships of Kitchener and Bowell to the north-west angle of the township of Hanmer; thence westerly along the southerly boundaries of the townships of Bowell, Foy, Harty and Hess to the south-east angle of the township of Moncrieff; thence southerly along the easterly boundaries of the townships of Hart, Ermatinger, Totten and Hyman to a point where the easterly boundary of Hyman intersects the Spanish River; thence westerly following the turnings and windings of the Spanish River to a point where it is intersected by the southerly boundary of the township of Dunlop; thence westerly along the southerly boundaries of the townships of Dunlop and 118 to the south-east angle of township 123; thence northerly along the westerly boundaries of townships 118, 119 and 120 to the south-east angle of township E in Mississagi Provincial Forest; thence easterly along the southerly boundary of township A to the southwest angle of township 114; thence northerly along the easterly boundaries of townships A, B, C and D to the north-east angle of township D; thence westerly along the southerly boundaries of townships 4, Alton, Jasper, Durban, Ethel and Comox to the south-east angle of township Y; thence northerly along the easterly boundaries of townships Y, Z, 7Z, 8Z and 9Z to the south-west angle of township 16; thence westerly along the southerly boundary of township 17 to the north-east angle of township 9A; thence northerly along the easterly boundary of township 10A to the north-west angle of township 17; thence westerly along the southerly boundaries of townships 19 and 20 to the east shore of Wakami Lake; thence northerly and westerly along the shore of Wakami Lake to the easterly boundary of township 11B; thence northerly along the easterly boundary of township 11B to the north-west angle of township 20; thence westerly along the southerly boundaries of townships 23, 24 and 25 to the south-east angle of township 12E; thence northerly along the easterly boundary of township 12E to the south-east angle of township 28; thence westerly along the southerly boundaries of townships 28 and 29 to the south-east angle of township 13G; thence northerly along the easterly boundary of township 13G to a point on the easterly boundary of township 13G which would be on a projection east of the northerly boundary of township 13H; thence westerly to the north-east angle of township 13H; thence continuing westerly along the northerly boundaries to township 13H and townships 22, 23 and 24 in range 20 to the north-east angle of township 25, range 20; thence northerly along the westerly boundary of township 24, range 21, to the

north-east angle of township 25, range 21; thence westerly along the southerly boundary of township 25, range 22, to the north-east angle of township 26, range 21; thence northerly along the westerly boundary of township 25, range 22, to the north-east angle of township 26, range 22; thence westerly along the southerly boundary of township 25, range 23, to the south-east angle of township 26, range 23; thence northerly along the westerly boundaries of township 25, range 23, and township 25 range 24, to the north-east angle of township 26, range 24; thence easterly along the northerly boundary of township 25, range 24, to the north-west angle of township 24, range 24; thence northerly along the westerly boundary of township 43 to the north-east angle of township 25, range 25; thence easterly along the northerly boundary of township 43 to the south-east angle of township 45; thence northerly along the westerly boundary of township 44 to the north-east angle of township 45; thence easterly along the northerly boundary of township 44 to the south-east angle of the township of Stover; thence southerly along the easterly boundary of township 44 to the south-west angle of the township of Lang; thence easterly along the northerly boundaries of the townships 41 and Addison to the south-west angle of the township of Clifton; thence southerly along the easterly boundary of the township of Addison to the south-west angle of the township of Chaplin; thence easterly along the northerly boundaries of the townships of Ramsden and Mageau to the south-east angle of the township of Manning; thence northerly along the western boundaries of the townships of Floranna, Lipsett and Lloyd to the north-east angle of the township of Calais; thence easterly along the northerly boundary of the township of Lloyd to the south-east angle of the township of Lerwick; thence northerly along the westerly boundaries of the townships of Kirkwall, Stefansson and Mons to the south-east angle of the township of Ericson; thence easterly along the northerly boundary of the township of Mons to the south-east angle of the township of Radisson; thence northerly along the westerly boundary of the township of Maude to the south-east angle of the township of Usnac; thence easterly along the northerly boundary of the township of Maude to the south-east angle of the township of Oscar; thence southerly along the easterly boundary of the township of Maude to the south-west angle of the township of Allenby; thence easterly along the northerly boundary of the township of Buchan to the south-east angle of the township of Allenby; thence southerly along the easterly boundary of the township of Buchan to the south-west angle of the township of Lisgar; thence easterly along the northerly boundaries of the townships of Wadsworth, Belford, Montcalm and Fortune to the south-east angle of the township of Aitken; thence southerly along the easterly boundaries of the townships of Fortune, Enid, Frey and Sewell to the south-west angle of the township of Hillary; thence easterly along the northerly boundary of the township of Pharand to the south-east angle of the township of Hillary; thence southerly along the easterly boundary of the township of Pharand to the south-west angle of the township of Childerhose; thence easterly along the northerly boundaries of the townships of McBride, Hassard, Beemer, English and Zavitz to the south-west angle of the township of Cleaver; thence southerly along the easterly boundaries of the townships of Zavitz, Hutt, Halliday, Mond, Natal, MacMurchy, Fawcett, Ogilvie and Browning to the north-west angle of the township of Stull; thence easterly along the northerly boundaries of the townships of Stull, McLeod and Ellis to the north-west angle of the township of Parker; thence southerly along the easterly boundaries of the townships of Ellis and Selkirk to the south-west angle of the township of Dundee; thence easterly along the northerly boundaries of the townships of Turner and Seagram to the north-west angle

of the township of Delhi; thence southerly along the easterly boundaries of the townships of Seagram, Clary and Sheppard to the south-east angle of the township of Sheppard which is the point of commencement."

"Copy of an Order-in-Council approved by the Honourable the Lieutenant-Governor, dated the 21st day of August, A.D. 1929.

Upon the recommendation of the Honourable the Minister of Lands and Forests, the Committee of Council advise that pursuant to the provisions of Section 7, subsection 2, chapter 291, R.S.O. 1927, during the close season (April 1st to September 30th) any person wishing to use fire out of doors for cooking or obtaining warmth or for any purpose whatever in the following described areas be required to first secure a written permit from a fire ranger:—

(1) The townships of Jaffray, Haycock, Melick, Pettypiece, Redditt and Pellatt.

(2) Within one mile on either side of the highway between Kenora and Granite Lake.

(3) Within a radius of three miles from Ingolf Station on the Canadian Pacific Railway.

(4) Commencing at the south-easterly angle of the township of Haycock, thence northerly along the easterly limit of the township of Haycock to the Canadian Pacific Railway, thence easterly to the south-westerly corner of the township of Langton, thence along the southerly shore of Eagle Lake and all its windings to Niven Bay on the Sixty Meridian, thence westerly to the forty-fourth mile post of Niven's Base Line, thence southerly twenty-three miles to Strawberry Lake, thence westerly along the Kenora-Rainy River boundary to Nester's Falls, thence along the shore of Sabaskong Bay to Turtle Portage, thence along the windings of the eastern shore of Whitefish Bay to Andrew Bay, Bigstone Bay to the north-easterly limit of Mining Location 224-P, thence to the southerly limit of the township of Haycock and easterly to the point of commencement.

The committee further advise that every person violating the provisions of this regulation shall be guilty of an offence and for each such offence shall be liable to a penalty of not less than Twenty-five Dollars (\$25.00) and not more than Three Hundred Dollars (\$300.00) and in addition to imprisonment for a period not exceeding ninety days, as provided by the Forest Fires Prevention Act, chapter 291, R.S.O. 1927."

(2) *Organization and Personnel*

Early in the year the District Forester at North Bay resigned, his resignation taking effect February 28th. The Forest Assistant there was then appointed District Forester and the vacancy filled with a new assistant.

In March the Forest Assistant at Pembroke was transferred to Kenora as Assistant. This man resigned in October and has not yet been replaced.

On the first of June a second Forest Assistant was appointed in the Georgian Bay Inspectorate.

In the Oba Inspectorate two Fire Inspectors were appointed, one with headquarters at Oba and the other with headquarters at Kapuskasing. The District Forester in charge was granted leave of absence as from the end of September and the Forest Assistant was appointed District Forester.

The changes in district boundaries consisted of—the transfer of the Rainy River Chief Ranger District from the Western to the Kenora Inspectorate, March 5th; the transfer to the Nipigon Chief Ranger District of that portion of the Thunder Bay Chief Ranger District east of Nipigon, March 5th; the transfer of the Smoky Falls Chief Ranger District from the Cochrane to the Oba Inspectorate, March 2nd.

The total field supervisory staff for the eleven inspectorates was as shown in the following table and consisted of nine District Foresters, one Assistant District Forester, nine Forest Assistants, one Forest Supervisor, six Fire Inspectors, one Assistant Fire Inspector, thirty-seven Chief Fire Rangers and one hundred and twenty-two Deputy Chief Fire Rangers. The Fire Inspectors at Gogama and Biscotasing and the Assistant Fire Inspector at Longlac also acted as Chief Fire Rangers.

There was direct supervision of one Chief or Deputy Chief Ranger to an average of every seven rangers.

ORGANIZATION AND PERSONNEL

Inspectorate	Area (acres)	Headquarters	Supervisory Staff	Chief Ranger Districts	Headquarters
Hudson...	26,000,000	Sioux Lookout	1—District Forester 1—Fire Inspector 3—Chief Rangers 12—Deputy Chief Rangers	Red Lake Sioux Lookout Armstrong	Goose Island Sioux Lookout Armstrong
Kenora . . .	14,080,000	Kenora . . .	1—District Forester 2—Forest Assistants 3—Chief Rangers 9—Deputy Chief Rangers	Kenora Minaki Rainy River	Kenora Minaki Fort Frances
Western . .	11,459,000	Port Arthur	1—Forest Supervisor 2—Chief Rangers 9—Deputy Chief Rangers	Thunder Bay Nipigon	Port Arthur Macdiarmid
Oba	25,520,000	Kapuskasing	1—District Forester 1—Forest Assistant 2—Fire Inspectors 1—Assistant Fire Inspector and Chief Ranger 6—Chief Rangers 17—Deputy Chief Rangers	Nakina Longlac Oba Franz Hearst Kapuskasing Smoky Falls	Nakina Longlac Oba Franz Hearst Kapuskasing Smoky Falls
Cochrane .	12,302,000	Cochrane .	1—Fire Inspector 4—Chief Rangers 15—Deputy Chief Rangers	Cochrane Abitibi Timmins Matheson	Cochrane Stimson Timmins Matheson
North Bay	5,105,000	North Bay	1—District Forester 1—Forest Assistant 3—Chief Rangers 11—Deputy Chief Rangers	Timagami North Timagami East North Bay	Elk Lake Timagami North Bay
Sudbury . .	12,644,000	Sudbury . .	1—District Forester 1—Asst. District Forester 1—Forest Assistant 2—Fire Inspectors and Chief Rangers 6—Chief Rangers 22—Deputy Chief Rangers	Foley West Foley East Mississagi West Mississagi East Webbwood Timagami West Sudbury North Sudbury South	Elsas Gogama Chapleau Biscotasing Espanola Mattagami Post Skead Sudbury

ORGANIZATION AND PERSONNEL—Continued

Inspec- torate	Area (acres)	Head- quarters	Supervisory Staff	Chief Ranger Districts	Headquarters
Soo.....	7,394,000	Sault Ste. Marie	1—District Forester..... 1—Forest Assistant..... 3—Chief Rangers..... 11—Deputy Chief Rangers	A.C.R..... Blind River..... Mississagi South.	Sand Lake Blind River Ranger Lake
Georgian Bay	3,711,000	Parry Sound	1—District Forester..... 2—Forest Assistants..... 3—Chief Rangers..... 6—Deputy Chief Rangers	Georgian Bay W. Georgian Bay E. Georgian Bay S.	Parry Sound Powassan Coboconk
Algonquin	3,522,000	Pembroke	1—District Forester..... 2—Chief Rangers..... 6—Deputy Chief Rangers	Algonquin North Algonquin South	Pembroke Brule Lake
Trent....	3,163,000	Tweed...	1—District Forester..... 1—Forest Assistant..... 2—Chief Rangers..... 4—Deputy Chief Rangers	Trent..... Madawaska.....	Bancroft Dacre

Total area, 124,900,000.

The average daily force, including the Chief and Deputy Chief Rangers, was as follows: April, 170; May, 692; June, 1,052; July, 1,097; August, 1,072; September, 889; October, 260. The largest number of men on duty at any one time, including Chief and Deputy Chief Rangers, was 1,110.

NUMBER OF MEN ON DUTY INCLUDING CHIEF AND DEPUTY CHIEF RANGERS

	1929	1928	1927	1926	1925	1924	1923
April 1st.....	77	49	44	19	24	22	4
April 15th.....	139	98	159	42	62	60	9
May 1st.....	454	293	361	168	360	215	205
May 15th.....	683	628	675	549	648	525	699
June 1st.....	981	992	958	896	822	756	1,104
June 15th.....	1,066	1,026	1,040	966	842	810	1,166
July 1st.....	1,090	1,071	1,046	982	847	812	1,198
July 15th.....	1,085	1,080	1,062	992	848	813	1,257
August 1st.....	1,072	1,068	1,051	987	845	806	1,220
August 15th.....	1,081	1,055	1,019	983	841	792	1,223
September 1st.....	1,083	988	926	918	835	745	1,115
September 15th.....	987	778	865	798	806	626	968
October 1st.....	407	242	240	257	245	148	291
October 15th.....	245	131	120	129	82	47	111
October 31st.....	154	93	57	44	.....	.....	.....

(3) Expenditures

The total expenditure for the year was \$1,734,013.87, less \$60,000.00 transferred to a charge against Forest Ranging to cover air operations in connection with that work, leaving the actual charge against Forest Fire Protection at \$1,674,013.87. The amount of fire tax collected for the year was \$353,258.07.

CLASSIFICATION OF EXPENDITURES

Item	1929	1928	1927	1926	1925	1924	1923
Pay roll.....	\$925,173 08	\$786,600 74	\$780,527 29	\$664,260 69	615,811 09	\$480,481 98	\$535,810 35
Equipment.....	168,367 55	137,070 76	109,496 05	108,387 12	134,692 18	144,540 75	133,056 47
Travel (inspection).....	53,097 39	58,259 25	39,494 42	29,065 24	33,649 18	32,797 35	31,436 73
Improvement work.....	82,180 13	76,496 09	63,333 45	19,097 63	225,723 85	61,427 30	54,876 42
Extra fire fighting.....	183,210 35	21,028 90	43,509 13	34,728 85	67,023 32	16,450 78	143,508 13
Express, postage, etc.....	21,619 43	16,866 97	20,951 71	30,105 86	39,472 70	33,818 69	28,083 20
Air operations.....	.....	.....	.....	.....	.....	.....	86,404 71
Maintenance.....	159,764 39	112,716 04	89,888 11	95,931 36	98,520 56	28,877 18	7,419 24
Miscellany.....	2,669 46	4,192 22	13,273 84	17,327 48	11,964 07	8,921 53	15,328 44
Gasoline and oil.....	129,738 04	51,797 50	72,295 61	67,720 04	26,924 17	40,527 77	7,485 69
Rent.....	8,194 05	6,748 25	7,226 40	5,920 17	7,528 62	7,206 91	5,251 41
Brush-burning.....	.....	.....	.....	.....	.....	.....	229 00
Advertising.....	.....	.....	.....	.....	.....	.....	14,066 45
Totals.....	*\$1,734,013 87	*\$1,271,776 72	*\$1,239,996 01	*\$1,072,544 44	*\$1,261,309 24	\$855,050 24	\$1,062,956 24

*Of this total \$80,000.00 was transferred in 1925, 1926 and 1927, and \$60,000.00 in 1928 and 1929, to a charge against Forest Ranging to cover air operations in connection with that work.

(4) *Fires*

Unlike that of the five preceding years the hazard during the summer of 1929 was the worst in our experience. With the exception of the Clay Belt, where conditions were perhaps subnormal, every district in the Province was faced with abnormal conditions.

The most westerly part of the Province experienced extreme conditions with the severity lessening eastwards. The western part of the Kenora District had a total precipitation of 13.58 inches between the first of January and the end of October as compared with 27.51 inches for the same period the year previous. From May until the end of the first week in October the danger of fire in this district was the greatest ever known and because of the drought, high temperatures and strong winds fire-fighting was a continuous and heart-breaking task. Fires which ordinarily could be extinguished in a short time burned underground for days and weeks, necessitating constant patrol and at times breaking away in the high winds.

The large number of fires in the district, and the necessity of keeping men and equipment on some of these for weeks in order to prevent them breaking away again soon used up the available supply of key men and equipment in that territory. It was necessary therefore to make transfers from the less hazardous districts in the east, but even this did not prove sufficient as the supply from the east was limited by the gradually increasing hazard there.

From the middle of August to the tenth of September conditions over the greater part of the Province were bad and the entire organization was taxed to the utmost. Every available piece of fire fighting equipment was in use and every key man on the staff was on duty almost twenty-four hours a day.

The season of 1929 supersedes that of 1923 as a bad fire year in every respect but the area burned. The coming season however may probably be even worse as in many districts the ground is dried out to a considerable depth and there is little water in the lakes or rivers and the swamps are mostly dry.

While the past season was bad it was not without its good features. It proved beyond a doubt that fires can be controlled under most adverse conditions. The effect of this upon the morale of the organization will be immeasurable. It also brought to light the vulnerable spots in the present system and will have a far-reaching effect in the strengthening of these.

While the number of fires is the second largest on record, 1,550, the area burned over in the territory under protection was kept down to 625,643 acres. This compares most favourably with other years of lower hazard particularly in view of the fact that the area under protection has been increased during the last four years by the addition of some twenty-five million acres north of the transcontinental line of the Canadian National Railways. This additional territory includes the Red Lake, Pickle Lake, Bee Lake and other mining areas and accounts for approximately fifty per cent. of the total area burned.

In the vast territory between the Berens River and Trout Lake large fires are known to have occurred but they were beyond the reach of our present organization and no attempt was made to control them.

Of the total area burned 580,989 acres or ninety-three per cent. was west of Lake Nipigon. This is a territory of vast distances, scattered population and little means of communication and transportation. Fires are therefore much more difficult to control than in the eastern and more settled areas where they can make little headway before being seen.

In contrast with this, the Trent Inspectorate, while very much smaller in area, had a total of 202 fires during the season and all but two of these were either out or under control within twenty-four hours from the time they were reported. This was made possible by the system of roads, towers and telephone lines in the district and the number of settlers available as fire fighters. The total area burned in this inspectorate was 5,345 acres.

Of the 1,550 fires reported 19.2 per cent. occurred in the month of July and burned 17.6 per cent. of the total area. In August, which was the worst month of the season, 30.5 per cent. of the total number of fires accounted for 48.6 per cent. of the total area. September accounted for 13.4 per cent. of the fires and 29.4 per cent. of the area. In October, 128 fires were reported or 8.2 per cent. but the area burned by these was less than one per cent. of the total area.

In the causes of fires, campers, which includes prospectors, berry pickers and tourists, are again high with 26.7 per cent. Lightning jumps up to 16.1 per cent. the highest percentage of fires due to this cause that we have had. This was due to the large number of dry electric storms during the season. One storm is known to have started sixteen fires in one Chief Ranger District alone.

Of the total area burned over the fires caused by campers accounted for 16.8 per cent. and those caused by lightning for 31.4 per cent. Fires due to railways while forming 12.0 per cent. of the total number were responsible for only one-tenth of one per cent. of the total area.

Of the total number of fires 65.6 per cent. were confined to areas of five acres or less and 87.4 per cent. to areas of 100 acres or less with 4.1 per cent. reaching areas of more than 1,000 acres.

Timberland burned over totalled 114,938 acres of which 104,264 acres were in the Hudson and Kenora Inspectorates.

The high acreage of land classed as barren is accounted for by the areas of old burn in the two western inspectorates over which fires again ran.

CLASSIFICATION OF AREA BURNED OVER
BY MONTH

Inspectorate	April		May		June		July		August		September		October		Totals	
	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.
Hudson.....	144	0.1	10,015	3.6	28,097	10.1	119,759	42.9	120,933	43.3	16	.....	278,964			
Kenora.....	85	0.1	5,654	2.1	51,898	18.9	170,878	62.3	45,506	16.6	36	.....	274,430			
Western.....	3	2.3	3,585	13.0	15,935	57.8	7,251	26.3	171	0.6	.....	.....	27,595			
Oba.....	3	.....	247	2.0	10,405	82.6	1,935	15.4	.....	.....	1	.....	12,591			
Cochrane.....	4	0.1	219	7.6	2,662	92.0	8	0.3	.....	.....	.....	.....	2,893			
North Bay.....	121	18.8	22	3.4	10	1.5	53	8.2	221	34.3	218	33.8	645			
Sudbury.....	2,073	50.5	511	12.4	84	2.1	226	5.5	593	14.5	111	2.7	4,105			
Soo.....	398	37.9	4	0.4	5	0.5	548	52.2	1	0.1	51	4.8	1,050			
Georgian Bay.....	38	2.0	14	0.7	51	2.7	280	14.7	1,325	69.7	193	10.2	1,901			
Algonquin.....	698	4.3	85	0.5	543	3.4	973	6.0	13,305	82.6	520	3.2	16,124			
Trent.....	299	5.6	216	4.1	44	0.8	1,986	37.1	2,115	39.6	300	5.6	5,345			
Totals.....	1,292	0.2	20,572	3.3	109,734	17.6	303,897	48.6	184,170	29.4	1,446	0.2	625,643			

CLASSIFICATION OF AREA BURNED OVER
BY ORIGIN

Inspectorate	Settlers		Campers		Railways		Lightning		Logging Operations		Smokers		Road Construction		Miscellaneous		Unknown		Totals	
	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.	Acres	Per cent.
Hudson.....	7	.....	75,280	27.0	24	.....	146,776	52.6	.....	.....	6,815	2.4	2	.....	46,500	16.7	3,560	1.3	278,964	.....
Kenora.....	319	0.1	22,073	8.1	71	.....	27,639	10.1	358	0.1	157	0.1	397	0.1	60,615	22.1	162,801	59.3	274,430	.....
Western.....	706	2.6	3,173	11.5	36	0.1	14,735	53.4	.....	.....	1	.....	.....	.....	.....	.....	8,944	32.4	27,595	.....
Oba.....	207	1.6	2,615	20.8	.....	.....	6,158	48.9	37	0.3	3	.....	.....	.....	13	0.1	3,558	28.3	12,591	.....
Cochrane.....	104	3.6	7	0.2	.....	.....	.....	.....	25	0.9	.....	.....	44	1.5	.....	.....	2,711	93.7	2,893	.....
North Bay.....	188	29.1	130	20.3	6	1.0	3	0.5	8	1.2	238	36.8	3	0.5	8	1.2	61	9.4	645	.....
Sudbury.....	153	3.7	568	13.8	178	4.4	84	2.1	2,258	54.9	835	20.3	10	0.3	16	0.4	3	0.1	4,105	.....
Soo.....	91	8.7	269	25.6	47	4.4	4	0.4	409	39.0	112	10.6	1	0.1	2	0.2	115	11.0	1,050	.....
Georgian Bay.....	137	7.2	374	19.7	132	7.0	542	28.5	1	.....	279	14.7	1	.....	.....	435	22.9	1,901	.....
Algonquin.....	1	.....	535	3.3	273	1.7	599	3.7	4,516	28.0	19	0.1	.....	.....	2,093	13.0	8,088	50.2	16,124	.....
Trent.....	474	8.9	150	2.8	14	0.2	176	3.3	90	1.7	103	1.9	29	0.6	173	3.2	4,136	77.4	5,345	.....
Totals.....	2,387	0.4	105,174	16.8	781	0.1	196,716	31.4	7,702	1.2	8,562	1.4	487	0.1	109,422	17.5	194,412	31.1	625,643	.....

CLASSIFICATION OF FOREST AREAS BURNED OVER

Inspectorate	Number of fires	Timber land, mainly coniferous, i.e., softwood	Timber land, mainly hardwood	Cut-over land, some softwood left	Cut-over land, some hardwood left	Young growth, mainly coniferous	Young growth, mainly hardwood	Barren land	Grass land	Totals (acres)
Hudson.....	179	81,099	.....	30,450	.....	30,300	.....	137,099	16	278,964
Kenora.....	285	23,165	27	67,593	1,581	131,107	2,230	48,575	152	274,430
Western.....	117	3,677	111	3,085	1,320	8,780	752	8,375	1,495	27,595
Oba.....	56	5,823	.....	155	.....	4,378	50	1,958	227	12,591
Cochrane.....	27	46	9	2,261	23	45	4	505	.....	2,893
North Bay.....	98	30	5	81	104	9	42	257	117	2,645
Sudbury.....	246	53	6	1,799	10	674	391	140	1,032	4,105
Soo.....	80	4	4	205	29	.....	106	285	417	1,050
Georgian Bay.....	113	22	40	147	84	91	478	586	453	1,901
Algonquin.....	147	91	655	3,171	2,006	414	1,802	6,948	1,037	16,124
Trent.....	202	16	55	368	104	1,666	2,230	574	332	5,345
Totals.....	1,550	114,026	912	109,315	5,261	177,464	8,085	205,302	5,278	625,643
1928 totals.....	536	37,220	21	6,530	634	29,758	1,101	24,024	1,095	100,383
1927 ".....	924	831	119	4,202	974	4,294	2,041	18,061	5,220	35,742
1926 ".....	1,110	10,266	2,468	12,866	9,378	17,583	11,303	19,262	5,248	88,374
1925 ".....	1,149	4,634	5,555	13,555	21,588	22,391	34,164	68,414	19,242	189,543
1924 ".....	851	24,067	6,592	11,089	12,057	31,760	15,908	42,353	2,190	146,017
1923 ".....	1,343	567,171	17,398	199,766	112,418	593,415	181,597	424,349	15,034	2,120,148

CLASSIFICATION OF LAND BURNED OVER

INSPECTORATE	Fires burning on one class of land only						Fires burning on both Crown and private land						Totals					
	Crown land			Private land			Originating on Crown land								Originating on private land			
	No. of fires	Area in acres	Per cent.	No. of fires	Area in acres	Per cent.	No. of fires	Crown land area in acres	Per cent.	Private land area in acres	Per cent.	No. of fires			Crown land area in acres	Per cent.	Private land area in acres	Per cent.
Hudson.....	173	278,948	100.0	3	13	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	179	278,964
Kenora.....	204	269,262	98.1	69	1,586	0.6	.....	.....	.....	.....	.....	10	2,085	0.8	1,143	0.4	285	274,430
Western.....	65	20,553	74.5	50	6,492	23.5	.....	.....	.....	.....	.....	2	175	0.6	375	1.4	117	27,595
Oba.....	27	12,267	97.4	29	324	2.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56	12,591
Cochrane.....	12	2,555	88.3	15	338	11.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	2,893
North Bay.....	44	193	29.9	54	452	70.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98	645
Sudbury.....	86	3,090	75.3	154	673	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	246	4,105
Soo.....	29	342	32.6	48	508	48.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80	1,050
Georgian Bay.....	31	646	34.0	72	1,006	52.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	113	1,901
Algonquin.....	91	12,411	77.0	45	2,183	13.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	147	16,124
Trent.....	80	2,681	50.2	117	707	13.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202	5,345
Totals.....	842	602,948	96.4	656	14,282	2.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,550	625,643

MEANS OF FIRE DETECTION

Inspectorate	CHIEF RANGER DISTRICT	TOTAL FIRES	AIR SERVICE		TOWERS		RANGERS		PUBLIC	
			Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.
Hudson	Red Lake.....	120	99	82.5	No	17	14.2	4	3.3	
	Sioux Lookout.....	34	11	32.4		6	17.6	17	50.0	
	Armstrong.....	25	14	56.0		1	4.0	10	40.0	
Kenora		179	124	69.3	Towers in use	24	13.4	31	17.3	
	Kenora.....	137	54	39.4		23	16.8	60	43.8	
	Minaki.....	38	14	36.8		2	5.3	22	57.9	
	Rainy River.....	110	62	56.4		3	2.7	32	29.1	
Western		285	130	45.6	3	1.1	38	13.3	114	40.0
	Thunder Bay.....	89	21	23.6	4	4.5	17	19.1	47	52.8
	Nipigon.....	28	13	46.4	7	25.0	5	17.9	3	10.7
Oba		117	34	29.1	11	9.4	22	18.8	50	42.7
	Nakina.....	12	11	91.7	..	....	..	....	1	8.3
	Longlac.....	3	2	100.0	..	....	..	....	..	....
	Oba.....	3	1	33.3	..	....	1	33.3	1	33.3
	Franz.....	4	..	....	1	25.0	1	25.0	2	50.0
	Hearst.....	21	2	9.5	5	23.8	5	23.8	9	42.9
	Kapuskasing.....	14	1	7.1	..	....	8	57.1	5	33.8
	Smoky Falls.....	0	..	....	..	....	..	....	..	....
		56	17	30.4	6	10.7	15	26.8	18	32.1
	Cochrane		10	2	20.0	8	80.0
Abitibi.....		6	..	....	..	....	6	100.0	..	....
Timmins.....		4	..	....	..	....	1	25.0	3	75.0
Matheson.....		7	..	....	..	....	4	57.1	3	42.9
	27	..	....	..	....	13	48.1	14	51.9	

North Bay.....	4	..	....	1	25.0	2	50.0	1	25.0
Timagami North.....	26	..	..	7	27.0	7	27.0	12	46.0
Timagami East.....	68	2	1.5	14	20.6	30	44.1	22	33.8
North Bay.....	98	2	2.0	22	22.5	39	39.8	35	35.7
Sudbury.....	3	..	....	1	33.3	1	33.3	1	33.3
Foleyet West.....	15	..	..	5	33.3	2	13.3	8	53.4
Foleyet East.....	2	1	50.0	..	..	..	..	1	50.0
Timagami West.....	18	2	11.1	7	38.9	2	..	7	38.9
Sudbury North.....	151	45	30.0	10	6.7	27	18.0	69	45.3
Sudbury South.....	35	10	28.6	6	17.2	8	28.8	11	31.4
Webbwood.....	5	..	..	..	..	3	60.0	2	40.0
Mississagi East.....	17	6	35.3	..	..	3	17.6	8	47.1
Mississagi West.....	246	64	26.0	29	11.8	46	18.7	107	43.5
Soo.....	22	6	27.3	1	4.5	4	18.2	11	50.0
A.C.R.....	55	2	3.6	4	7.3	27	49.1	22	40.0
Blind River.....	3	..	..	1	33.3	1	33.3	1	33.3
Mississagi South.....	80	8	10.0	6	7.5	32	40.0	34	42.5
Georgian Bay.....	73	..	..	27	36.9	10	13.7	36	49.4
Georgian Bay West.....	38	9	..	9	23.7	10	26.3	19	50.0
Georgian Bay East.....	2	..	..	..	..	2	100.0	..	..
Georgian Bay South.....	113	8	10.0	36	31.8	22	19.5	55	48.7
Algonquin.....	77	..	..	27	35.1	20	26.0	30	38.9
Algonquin North.....	70	..	..	19	27.1	23	32.9	28	40.0
Algonquin South.....	147	..	..	46	31.3	43	29.2	58	39.5
Trent.....	116	..	..	70	60.4	15	12.9	31	26.7
Madawaska.....	86	..	..	51	59.3	8	9.3	27	31.4
Trent.....	202	..	..	121	59.9	23	11.4	58	28.7
Totals.....	1,550	374	24.4	280	18.1	317	20.5	574	37.0

No Aircraft in Use

(5) *Permits*

The number of burning permits issued during the season totalled 14,038 for an area of 51,752 acres. While the acreage covered by the permits is smaller than in 1928 the area of slash actually burned is probably larger as in many cases it was impossible to burn in the previous season because of the wet weather.

STATEMENT OF PERMITS ISSUED

DISTRICT	Number of Permits						
	1929	1928	1927	1926	1925	1924	1923
Red Lake.....	63	129	24	31	99	70	28
Sioux Lookout.....	78	40	103	26			
Armstrong.....	13	5	28				
Kenora.....	769	611	497	179	3	128	362
Minaki.....	55	44					
Rainy River.....	40	29	61	31	19	16	216
Thunder Bay.....	293	333	433	264	235	100	139
Nipigon.....	3	4	10				
Nakina.....	7	42	37	51	95	36	18
Hearst.....	1,074	1,501	1,264	1,804	1,656	1,011	1,000
Longlac.....	3	5		2			50
Oba.....	15	24	34	29	11	16	
Franz.....	9	6	14	5	10		
Kapuskasing.....	1,903	2,274	1,245	1,022	1,187	668	531
Smoky Falls.....	16		84	76			
Cochrane.....	2,078	2,637	2,871	2,506	2,486	1,815	1,480
Abitibi.....	20		5	65	157	2	2
Matheson.....	1,664	1,236	1,482	1,603	1,515	1,275	1,122
Timmins.....	1,241	1,034	1,173	1,407	1,212	580	406
New Liskeard.....				836	637	408	361
A.C.R.....	95	51	72	97	82	18	10
Blind River.....	191	134	298	164	126	100	36
Mississagi South.....		2	3				
Foley West.....	43	43	59	58	3	34	11
Foley East.....	199	185	163	175	169	102	1
Mississagi West.....	55	22	77	67	20	15	1
Mississagi East.....	6	12	26	18	12	9	
Webbwood.....	222	169	322	183	162	119	25
Sudbury North.....	12	15	18	16	36	173	36
Sudbury South.....	854	540	766	580	411	149	
Temagami West.....	27	12	11	14	19		
Temagami North.....	988	951	765	294	253	200	
Temagami East.....	277	139	223	395	174	86	11
North Bay.....	914	724	829	971	691	360	61
Georgian Bay West.....	105	111	87	83	100		
Georgian Bay East.....	165	155	162	207	159		
Algonquin North.....	50	29	45	14	33	29	
Algonquin South.....	106	105	73	103	84	58	
Trent.....	150	77	57	31	106	24	
Madawaska.....	235	181	172	59			
Totals.....	14,038	13,611	13,593	13,466	11,962	7,602	5,907

STATEMENT OF PERMITS ISSUED

DISTRICT	Acreage Covered by Permits						
	1929	1928	1927	1926	1925	1924	1923
Red Lake.....	29	109	56	15	416	215	95
Sioux Lookout.....	570	85	189	63			
Armstrong.....	4	18				1	
Kenora.....	2,170	1,671					
Minaki.....	18	5	3,123	442	2	325	35,006
Rainy River.....	403	378	1,162	2,144	174	57	1,374
Thunder Bay.....	1,137	7,777	2,428	993	1,029	463	1,081
Nipigon.....	15	2	110				
Nakina.....	3	18	19	35	28	25	53
Hearst.....	4,898	7,119	3,358	3,435	3,721	2,311	2,335
Longlac.....							64
Oba.....	7	7	7	28	1	60	
Franz.....					1		
Kapuskasing.....	7,443	13,807	5,085	4,106	4,222	2,351	2,126
Smoky Falls.....	22		72	205			
Cochrane.....	6,414	16,901	5,577	5,623	4,462	4,010	4,348
Abitibi.....	19		4	213	426		1
Matheson.....	7,554	5,031	3,251	4,884	5,211	4,573	5,027
Timmins.....	6,801	2,222	1,812	2,354	2,064	1,421	918
New Liskeard.....				2,039	2,154	1,345	1,160
A.C.R.....	184	1,121	269	408	1,257	100	36
Blind River.....	380	130	1,199	1,041	1,119	619	294
Mississagi South.....			1	27			
Foley West.....	23	29	1,370	1,008	25	2,959	52
Foley East.....	65	87	2,280	1,613	3,152	3,402	5
Mississagi West.....	331	310	2,373	2,208	2,555	81	408
Mississagi East.....	9	26	2,984	2,843	4,741	2	
Webbwood.....	648	449	7,565	4,125	2,768	2,009	81
Sudbury North.....	13	14	556	137	293	425	187
Sudbury South.....	2,184	941	5,105	2,089	1,957	6,900	
Temagami West.....	34	3	7	27	6		
Temagami North.....	1,228	1,272	1,412	319	1,197	303	
Temagami East.....	579	217	514	458	819	172	41
North Bay.....	1,697	1,366	1,348	1,830	1,384	518	92
Georgian Bay West.....	307	157	297	201	742		
Georgian Bay East.....	730	380	456	558	418		
Algonquin North.....	3,362	33	15	148	377	719	
Algonquin South.....	1,753	141	139	199	121	599	
Trent.....	295	268	550	111	326	60	
Madawaska.....	423	810	1,043	86			
Totals.....	51,752	62,905	55,762	45,988	47,168	36,025	54,784

STATEMENT OF PERMITS ISSUED

MONTH	Number of Permits						
	1929	1928	1927	1926	1925	1924	1923
April.....	640	116	663	100	451	127	
May.....	2,579	3,372	2,857	3,580	2,185	849	2,131
June.....	5,043	4,494	4,641	3,341	2,273	3,614	711
July.....	2,937	2,581	2,082	2,643	2,172	1,388	1,314
August.....	1,520	2,139	1,671	2,065	2,484	1,093	1,077
September.....	1,220	899	1,656	1,672	2,367	528	566
October.....	99	10	23	65	30	3	108
Totals.....	14,038	13,611	13,593	13,466	11,962	7,602	5,907

MONTH	Acreage Covered by Permits					
	1929	1928	1927	1926	1925	1924
April.....	2,662	701	7,138	3,686	7,981	4,956
May.....	9,882	21,435	15,265	13,484*	12,397	2,812
June.....	24,581	23,453	13,896	12,020	5,851	10,188
July.....	8,627	9,589	5,662	7,521	7,685	3,546
August.....	2,693	5,796	8,408	4,434	6,667	5,021
September.....	2,302	1,812	4,742	4,800	6,546	9,450
October.....	1,005	119	651	43	41	52
Totals.....	51,752	62,905	55,762	45,988	47,168	36,025

(6) *Equipment*

Fire fighting equipment of all kinds was put during the season to the most severe test. Especially was this true of the forest fire-fighting pumps and hose. These failed in only one respect—the limited supply.

Probably never before, certainly not in Ontario, have the pumps been called upon to stand up under such severe conditions. There were breakages, of course, many of them, but these were due largely to the inexperience of many of the operators who had to be picked up at random to man the many fires.

At one time ninety-six pumps were in operation in the Hudson and Kenora Inspectorates and more would have been in use had they been available. Seven pumps were used on one fire in the Kenora District, one of which ran continuously for 200 hours and two others for 175 hours each.

Other mechanical equipment in use also did yeoman service but the season demonstrated conclusively that there is little advantage in spending thousands of dollars each year on pumps, motor cars, and boats unless the staff is made up of men who can intelligently operate this equipment.

A portable wireless set was given a thorough trial on one of the larger fires in the Red Lake District. This set provided during the course of the fire continuous communication between the suppression crew and headquarters, a distance of thirty miles. Such communication in a country where nearly all transportation is by air is at times invaluable and it is expected that more of these sets will be put into use.

Aircraft were subject to continuous use throughout the season, particularly for the transportation of men and supplies. As was to be expected under such severe conditions the old H.S. 2 L. machines faltered. Two of these were condemned during the season and three more after the close of the season. The Moth machines, however, stood up wonderfully well under the strain.

MAJOR EQUIPMENT PURCHASED AND IN USE

INSPECTORATE	Fire Fighting Units		Fire Fighting Hose (feet)		Portable Hand Pumps		Tents		Blankets (pairs)		Canoes		Small Motor Boats		Launches		Auto Trucks		Railway Motor Cars		Velocipedes		Out-board Motors		Binoculars	
	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use	Purchased 1929	Total in use
Hudson	19	69	33,000	137,300	24	111	13	89	175	553	7	63	3	8	3	4	1	6	2	2	3	6	5	20	1	1
Kenora	30	51	86,525	107,500	112	148	28	62	101	386	5	44	8	10	4	1	1	3	1	1	2	2	9	14	2	1
Western	6	21	11,900	29,200	52	66	18	40	168	271	7	20	1	1	1	1	3	1	3	2	2	7	1	1	2	2
Oba	2	37	2,000	78,900	..	207	1	137	12	752	..	63	9	14	2	2	..	..	..	13	..	28	8	13	3	15
Cochrane	3	31	14,000	64,200	25	173	6	64	75	452	3	57	1	1	5	1	5	2	11	1	5	1	2	3	5	5
Soo	..	..	2,500	36,600	10	85	7	75	..	415	5	36	..	..	..	..	..	..	..	..	..	9	2	4	6	12
Sudbury	3	66	4,000	168,100	..	212	25	199	75	1,162	1	162	..	11	2	9	3	8	..	..	7	6	3	6	15	15
North Bay	4	27	11,000	59,500	13	65	11	90	..	594	..	79	2	3	1	8	6	15	..	..	..	19	1	3	8	22
Georgian Bay	2	18	4,000	34,300	..	96	2	44	37	308	2	47	1	2	..	7	6	..	..	..	..	4	1	3	..	9
Algonquin	3	13	9,400	24,600	6	80	1	63	75	462	3	53	3	6	..	3	2	3	..	..	..	7	3	6	2	8
Trent	..	9	..	17,100	..	65	5	20	21	196	2	17	5	5	..	..	6	7	..	..	1	1	..	7	..	18
Totals	70	358	178,325	757,300	242	1,308	120	883	339	5,551	35	641	33	61	3	45	24	69	4	38	4	117	35	87	31	107

(7) *Locomotive Inspection*

As in previous years two men devoted their whole time to the inspection of fire protective appliances on locomotives operating within the Fire Districts.

A total of 1,964 locomotive inspections were made covering 871 locomotives operating on railway lines under the jurisdiction of the Board of Railway Commissioners for Canada, the two inspectors having appointments as officers of the Board. In addition, 110 inspections were made of Temiskaming and Northern Ontario Railway locomotives and forty-six inspections of logging locomotives, 2,120 inspections in all.

LOCOMOTIVE INSPECTION

Railway	Number Inspected					Total No. Locomotives	Total Number Inspections										Inspections Showing Defects		Percentage Defective					
	Times						1929	1929	1928	1927	1926	1925	1924	1923	1929	1929	1929	1928	1927	1926	1925	1924	1923	
	1	2	3	4	5 and over			1929	1928	1927	1926	1925	1924	1923	1929	1929	1929	1928	1927	1926	1925	1924	1923	
C.P.R.	171	83	51	43	42	390	890	918	805	739	799	851	860	.....	0.5	1.2	0.8	0.8	0.5	1.9	2.3		
C.N.R.	188	120	55	42	46	451	995	925	915	962	988	1,001	856	16	1.6	1.5	0.8	1.8	0.5	1.5	2.7			
A.C. & H.B.R.	3	6	3	5	4	21	64	65	19	20	45	45	29	.....	.....	.....	.....	.....	.....	.....	.....
A.E.R.	2	2	2	.....	.....	6	12	17	15	18	21	15	15	.....	.....	.....	.....	.....	.....	.....	.....
N.C.R.	3	.....	.....	.....	.....	3	3	.....	.....	.....	3	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
T. & N.O.	11	24	14	1	.....	51	110	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Logging Railways	24	5	4	.....	.....	33	46	.....	.....	.....	.....	.....	.....	14	30.4	.....	.....	.....	.....	.....	.....
Totals	402	240	129	91	93	955	2,120	1,925	1,754	1,742	1,856	1,920	1,760	30	1.4	1.0	1.0	1.3	0.6	1.6	2.5			

Average cost per inspection: 1929, \$1.84; 1928, \$1.74; 1927, \$1.78; 1926, \$1.91; 1925, \$1.78; 1924, \$1.80; 1923, \$1.88.

(8) *Improvements*

In spite of the bad fire year it was possible to complete during the season a considerable amount of building, particularly in the eastern portion of the Province.

The major improvements consisted of the erection of 582 miles of permanent telephone lines, twenty-three steel lookout towers, seven wooden lookout towers and seven boat and storehouses.

The largest building erected was the combined boat and storehouse at Kenora. This building is of corrugated metal with wire glass windows throughout and consists of a boathouse thirty-six feet by fifty-five feet and a storehouse twenty-two feet by fifty feet. The boathouse provides accommodation for a fifty-foot boat.

Further wireless stations were established in the Hudson Inspectorate and two in the Cochrane Inspectorate. Stations are now located at: Sioux Lookout, two stations, Gold Pines, Goose Island, Red Lake, Swains Lake, Woman Lake, Kapakik Lake, Pickle Lake, Savant Lake, Fort Hope, Caribou Lake, Armstrong, Little Abitibi Lake, Stimson, Maple Mountain, Elk Lake and Timagami.

It was intended to instal a station at Wingiskus Lake north-west of Minaki but the severe fire season prevented this.

PERMANENT IMPROVEMENTS

Completed to October 31st, 1929

Cabins.....	272
Storehouses.....	55
Boathouses.....	31
Combined Storehouses and Boathouses, etc.....	9
Bunkhouses.....	40
Offices.....	13
Garages.....	50
Other Buildings.....	78
Hose Towers.....	42
Wooden Lookout Towers.....	131
Steel Lookout Towers.....	91
Permanent Telephone Lines (miles).....	2,532
Temporary Telephone Lines (miles).....	79

(9) *Air Operations*

Aircraft were during the season called upon to do a greater amount of transportation than ever before. In many sections of the Province the great distances make any other means of transportation out of the question when speed is necessary as in the case of fire protection. So many fires were burning at the same time and requiring the use of aircraft that machines of commercial companies had to be called in to assist our own organization.

During the season machines were located as follows:

Goose Island.....	2 H.S.2 L's.
	1 Moth
Sioux Lookout.....	2 H.S.2 L's
	1 Moth
Kenora.....	2 H.S.2 L's.
	1 Moth
Fort Frances.....	1 H.S.2 L.
	1 Moth (part season)

Shebandowan Lake.....	1 H.S.2 L.
Orient Bay.....	1 H.S.2 L.
Longlac.....	1 H.S. 2 L.
	1 Moth.
Oba Lake.....	1 H.S.2 L.
	1 Moth
Remi Lake.....	1 Moth
Sault Ste. Marie.....	1 Moth
Biscotasing.....	1 Moth
Sudbury.....	2 Moths

At the beginning of the season three H.S.2 L machines were located at Goose Island, but in June one of these caught fire and was burned.

On July 15th the H.S.2 L. at Fort Frances was damaged beyond repair and a machine at Kenora was sent to replace it. It in turn was also damaged beyond repair on October 2nd.

(10) *Hazard Disposal*

Some work was done in cleaning up fire hazards around the towns of Sioux Lookout, Redditt, Biscotasing, Foleyet, and Gowganda. The work done at Redditt was largely instrumental in saving that town from destruction by a large fire which burned to the very edge of the fire guard which had been made.

A bad hazard caused by windthrown timber was cleaned up on a strip 200 feet wide along the south side of the Caadian National Railways between Jones and Favel.

Another bad hazard was disposed of along the Kenora-Redditt Road which had resulted from a fire in 1923.

In the Oba and Cochrane Inspectorates the special work was continued in disposing of slash and debris through the settlements and in encouraging settlers to burn their clearing and pulpwood slash as rapidly as possible.

Considerable work was also done in connection with the hazards created by the construction of roads and power lines in all other sections of the Fire Districts.

This line of work in addition to the direct benefit in lessening the danger from fires has a great moral effect upon the entire public in the districts concerned.

(11) *Travel Permits*

The travel permit system again proved its worth in the districts in which permit areas were set aside. These areas now comprise the greater part of the Soo, Sudbury and North Bay Inspectorates.

A total of 20,738 travel permits were issued during the season. Of these 18,268 permits were issued for the Ferguson Highway between North Bay and Latchford and in each case was for a car regardless of the number of people in the car. This is an increase of 4,651 permits over 1928 for this highway alone.

The balance of 2,470 permits issued for Mississagi and Timagami Provincial Forests and other areas under the permit system covered 5,443 persons.

(12) Meteorological Studies

The Dominion Meteorological Service again provided daily special weather forecasts which were of great assistance. This service also provided further weather recording instruments for use at different headquarters and continued to assist in the work of relating weather factors and fire hazards.

II. REPORT OF THE DIRECTOR OF AIR SERVICE

Introduction

The 1929 operating period of the Provincial Air Service was a most eventful season, not altogether unexpected.

The annual forecasts and the predictions of meteorological experts gave sufficient evidence that an abnormal season was anticipated. As previous seasons inclined to the rainy rather than dry weather it was safe to assume that 1929 would offer a diversion in the way of dry weather.

During the period under review the service, operating 12 H.S.2 L. flying boats, 12 moth seaplanes, 1 Vedette amphibian and 1 D.H. 61, flew 11,602.00 hours without injury to any passenger or personnel. Consideration may fittingly be given to the accomplishments of the past operating year which speaks well for the diligence, resource and determination displayed by the personnel of the Air Service in general.

The hours flown during the 1929 operating period seem considerably out of proportion to the highest number of hours obtained in preceding years. The same number of machines were utilized as last year and although they were used to the utmost advantage in every possible way the number of machines in the Service was inadequate to meet the flight requisitions of the Forestry Branch.

That the Service would be lacking in suitable and sufficient equipment was anticipated and was acted upon to the extent of recommending that new equipment be purchased to replace or act as an adjunct to the transport or suppression aircraft now operating. Each year the Service is called upon to undertake additional work, extend its field of operation, transport greater loads, open new bases and set an example as aircraft operators.

The day of the flying boat as an economical means of air transportation in this Service is past. Those in use in this Service have rendered exceptional service for the last five years but each year their value and condition have depreciated to such an extent that the reconditioning of these aircraft may now be considered as not an economical operation.

The severe fire hazard period, which extended practically over the entire operating season, saw the Service equipment being used to the limit by the Forestry Branch. In many districts machines were flying from early morning until late at night, day after day, servicing the fire crews, patrolling areas, conveying fire equipment from old to new fires as they broke out and in many instances collecting civilians from remote areas to assist as fire fighters.

An average of thirty fires were raging in the western districts at one period and the dense smoke put up by these fires made flying exceedingly hazardous. During this period of dry weather pilots flew at an altitude of no higher than 300 feet, day after day, for periods ranging from three to eight hours, to furnish the fire-fighting crews with food and equipment. The hazard was so severe that risks were taken, such as landing in small lakes near fires, flying cross-country at low altitudes over dry areas, which would not have been taken under ordinary conditions. The Air Service in all its dealings has endeavoured to carry out the

principles of the constitution of Ontario, its aims and ambitions and its duty to the public.

Though the flying personnel of the Service achieved their part it was insufficient to cope with the daily increase of fires and subsequent demand for more machines or flying. The complement of machines in some districts was inadequate to deal with the abundance of work accumulating, and to relieve the congestion, commercial flying was purchased by the Forestry Branch.

The pirating of Provincial Air Service personnel by commercial operators in the Dominion of Canada continues. The result of these persistent appeals from commercial operators coupled with the monetary gain by the personnel creates a number of vacancies in our Air Service each year. To meet this exigency the Service has adopted a policy of training a limited number of pilots and engineers so as to ensure that at the commencement of the operating season there will be a full complement of crews with pilots and engineers in reserve.

The Department made purchase of four aircraft during the operating period of 1929; one Vickers' Vedette Amphibian with hull modifications to permit of photographic operation, either oblique or vertical, a type that has been required in connection with our photographic and timber inventory programmes for the past three years. I am very happy to report that this year with this better performing aircraft a more efficient photographic programme was carried out, more square miles photographed in a lesser time and at a lesser cost. Three moth aircraft were purchased and added to the detection fleet.

The D.H. 61 was reconditioned during the overhaul period to permit of an extensive dusting programme. At the conclusion of the dusting programme and while this machine was enroute cross-country, from Muskoka to Sault Ste. Marie, the Bristol Jupiter engine installed in the D.H. 61 failed. This was the second major engine failure in this aircraft during the 1929 operating period. The first failure occurred when the machine was on aircraft and engine test early in the spring. The manufacturer replaced the first engine without cost. When the second failure occurred after very careful investigation of operation conditions and upon dismantling of engine, it was decided that a new or different engine was required. During the summer months a Pratt & Whitney Hornet air-cooled engine of 525 H.P. replaced the former Jupiter engine. Thus far an improved performance has been recorded.

During the reconditioning period, 1928-29, the Service replaced the Cirrus Mk II air-cooled engine of 80 h.p. with the Gipsy air-cooled engine of 100 h.p. This additional horsepower gave the moth a much better performance, permitting this light aircraft on pontoons to get in and out of small bodies of water, an essential requirement in connection with the detection and suppression flying programme. During the operating season moth aircraft with this installation flew 5481.25 hours with no major engine failure or a forced landing which could be attributed to engine trouble.

One accident of major category was encountered during the operating season of 1929, that of the complete loss of one H.S.2 L. flying boat at Goose Island, Lac Seul, Western operating district. Aircraft G-CAOF had just been refuelled and was standing by awaiting pilot and crew to carry out a flight requisition in connection with a suppression flight. In refuelling, the main tanks had overflowed and the surplus gasoline ran down the side of the hull on to the water. A match tossed thoughtlessly into the water was responsible for the fire igniting the gasoline on the surface and the flames on the water soon enveloped the hull, an entirely wooden structure. No part of the aircraft or equipment thereof could be salvaged.

Three other accidents were encountered during the latter part of the summer activity. Two H.S.2. L. flying boats landing and taking off on the waters adjacent to Fort Frances operating base hit deadheads, rendering the aircraft unairworthy. The age of the aircraft and the location of accident was such that after very careful survey of all conditions it was decided to write off the aircraft, hulls and wings, and send engines, aircraft equipment and all useful parts to Sault Ste. Marie stores.

One moth aircraft operating in the Eastern district from Remi operating base, was submerged when landing gear collapsed landing at Little Abitibi Lake. Unfortunately the pilot and two ground rangers stationed in this remote area were unable to salvage or lift the aircraft from the water on account of the heavy weather conditions. When assistance was brought to Little Abitibi Lake and aircraft pulled from the water it was found after examination that wings and wooden fuselage could not be flown out for reconditioning. The engine, instruments, all aircraft parts and flotation gear were flown out to Remi operating base, and shipped to Sault Ste. Marie for reconditioning.

Worthy of mention at this time is the report on the excellent performance of H.S.2 L aircraft as underlisted. It is to be noted that these aircraft flew better than 500 hours each; this in six months' active flying operations:—

AOQ.....	662.05 hours
AON.....	642.50 hours
AOK.....	626.15 hours
AOP.....	532.40 hours

Organization—Flying Operations.

No drastic changes were made in the administration of flying operations for the period under review.

Two districts were operated as of the year 1928 with one additional base being added to the Western district, that of Caribou Lake, thus to cut down on the necessity of considerable cross-country flying re detection and suppression programmes of the remote areas in the District of Patricia.

The schedule of flying in connection with the operation of photography, forest inventory and special transportation, was taken care of by a headquarters' flight. Aircraft Vedette and D.H. 61, attached to this flight when required in connection with the programme of detection or suppression, were allocated to either the Eastern or Western districts to carry out any requisition flying of this nature.

The Disposition of Aircraft in the Western District was as follows:

Sioux Lookout.....	Moth	P.A.
	H.S.2 L.	O.G.
Goose Island.....	Moth	O.Y.
	H.S.2 Ls.	O.F., O.K., & O.Q.
Fort Frances.....	Moth	A.C.
	H.S.2 Ls.	O.P. & O.R.
Kenora.....	Moth	P.B.
	H.S.2 L.	P.F.
Orient Bay.....	H.S.2 L.	O.J.
Shebandowan.....	H.S.2. L.	P.E.
Caribou Lake.....	H.S.2. L.	O.N.

The Disposition of Aircraft in the Eastern District:

Sault Ste. Marie.....	Moth	P.C.
Sudbury.....	Moths	O.W. & O.X.
Biscotasing.....	Moth	A.D.
Rem' Lake.....	Moths	P.H. & O.Z.
Oba Lake.....	Moth	O.U.
	H.S.2. L.	O.A.
Longlac.....	Moth	A.A.
	H.S.2. L.	O.I.

Reconditioning.

The reconditioning period, the period from November 1928 to May 1st, 1929, was administered as of the previous season. All work in connection with the reconditioning or overhaul of aircraft and aircraft engines was carried out at the Provincial Air Service plant at Sault Ste. Marie, under the very strict supervision of the Plant Superintendent, who is directly responsible to the Director. During the flying period all engines requiring complete overhaul were shipped to Sault Ste. Marie, reconditioned there and returned to the operating base.

The twelve H.S.2. L aircraft which flew to Sault Ste. Marie at the conclusion of the 1928 flying programme required a very rigid inspection. These aircraft are now five years old and each season these particular craft are subject to very severe wear and tear operating in the District of Patricia where the shorelines are rocky and rugged. Considerable replacements were necessary to these boat hulls.

A new department at the plant at Sault Ste. Marie was organized to recondition and maintain pontoons, the water gear of the moth aircraft of the detection fleet. Certain modifications to these pontoons have been carried out which makes the pontoon a better float for our work.

During the reconditioning period portable sectional canoes were manufactured in the aircraft section of the plant at Sault Ste. Marie. These canoes were required in connection with suppression work. The canoes can be nested and carried by the transport aircraft of our Service.

Detection.

Fire detection is entirely controlled by the District Foresters. During the flying period, 1928-29, 3,070.30 hours flying were carried out strictly under the requisition of the District Foresters. This is nearly double the time required during the previous year. The detection unit of the Service, the moth aircraft, carried out the greater portion of this work.

Suppression.

Aircraft continue to be an important supplement to the regular Forestry Branch organization as a means of transportation, especially in the remote areas of the Province. 4,592.55 hours were devoted to suppression flying during this operating period.

Sketching.

The hours devoted to flying in connection with the sketching or classification of forest types were considerably less than in previous years, due to the fact that other duties, suppression and detection, had prior claim to the services of aircraft. During the 297.05 hours flown in the sketching programme 2,360 square

miles were sketched. This included 560 square miles of Haliburton County, and 1,800 square miles of the north-east corner of the Nipigon Reserve.

A considerable portion of the hours flown represent ferrying to and from the areas to be sketched, which could not be avoided under the circumstances brought about by the fire hazard period, especially in the Nipigon District where the machine reported back to its base, Orient Bay, daily, to perform any duties required by the ground forces.

Photography.

The Vickers' Vedette, which was purchased by the Branch primarily for the photographic duties, performed and carried out the flying in connection with the oblique and vertical photographic programme as was expected. Unfortunately this particular aircraft was repeatedly called upon to perform suppression duties which naturally has priority; thus the photographic programme laid down for the season was interfered with. Of the 207.45 flying hours required in connection with the topographical survey 182.50 hours were devoted to vertical photography, covering 900 square miles, and 24.55 hours to oblique photography, covering 1,000 square miles; making a total of 1,900 square miles.

These hours do not represent the hours spent in actual photography. A large percentage was taken up in ferrying to and from operating bases and gaining the required height.

Moth aircraft were employed in the photographic programme. Most of this work was, however, of a preliminary nature, such as plotting the area accurately on the maps and permitting the forester to become thoroughly acquainted in preparation for suitable weather conditions and the arrival of the photographic machine, the Vedette.

The Vedette accomplished three times as much work than the other aircraft heretofore flown in connection with the photographic programme. This machine is adapted to photography, both from the pilot's and operator's standpoint.

Photographic aircraft were employed as follows:—

Vedette.

1. S.E. corner Mississagi Forest Reserve. West to Helen Lake, south to Lake Superior. Total 560 square miles. Operated from Orient Bay base.
2. S.E. corner Mississagi Forest Reserve. Total 180 square miles. Operated from Bisco.

Moth.

1. S.E. corner Mississagi Forest Reserve. Total 60 square miles. Operated from Bisco.
2. Eastern section Timagami Reserve. Total 100 square miles. Operated from Sudbury.

H.S.2 L.

1. Exton North to Albany River.
2. Cavell North to Albany River. Operated from Longlac. A combined total of 1,000 square miles.

Ferrying.

During the operating season of 1929 a total of 523.10 hours were devoted in transporting machines to and from their various operating bases and to and from Sault Ste. Marie, the outgoing and returning aircraft of the season's flying activity.

Operation Administration and Inspection.

Further important use of the aircraft as an important supplement to the regular ground organization and apart from the use of the aircraft as a means of detection or transportation in connection with suppression, is the evidence that District Foresters and their officers are using aircraft of the Service as a means of transportation for inspection of their entire districts. During the season under review the Service flew 1,584.40 hours on flights requisitioned and classified as operation, administration and inspection.

Conclusion.

The Provincial Air Service is distinctly proud of its unique record. Since its inauguration it has relied entirely on its own resources, has operated under difficulties, trained some of Canada's best pilots, increased its flying hours year by year and made for itself a name on a parity with the leading commercial flying operating companies of the world.

It is my happy privilege to commend the entire personnel of the Provincial Air Service, whether ground or flying staff, for their untiring, splendid efforts, their devotion to duty, day and night, in carrying out the requirements whether active flying operations, maintenance or reconditioning. The Service was put to a very severe test and without their unceasing, untiring efforts it would have been impossible to have met the situation with the results achieved.

Operating Statistics.

The attached statistical summary further indicates the increasing activity in every phase of the Service's flying programme.

Dusting.

The Service was again called upon to act in conjunction with the Entomological Department of the Dominion Government with a view to exterminating the looper worm despoiling the hemlock trees in the residential and surrounding district of the Muskoka Lakes and Parry Sound.

The D.H. 61 was modified to permit of a larger and modern dusting apparatus being installed, and after a series of test flights made for the purpose of gauging the most suitable delivery speed of the apparatus, the machine was sent to Muskoka on June 11th.

Dusting operations were completed at Muskoka on July 11th, when machine proceeded to Parry Sound to dust a small area in the region of Amik Lake.

During the 21.25 hours devoted to dusting 38,700 pounds of calcium arsenic were used, which included 35,400 pounds used at Muskoka and 3,300 pounds at Amik Lake over a combined area of approximately 1,700 acres.

Due to the inconsistent weather many valuable hours were lost each day and consequently the programme took longer to complete than was anticipated. The intricate flying connected with tree dusting can only be accomplished satisfactorily and safely under ideal weather conditions. Also the effectiveness of the dust depends largely on the humidity of the air, calm wind and quantity of dew on the tree foliage, such as usually occurs in the early morning or late evening.

Tree dusting is still in the experimental stage, particularly as regards the development of suitable aircraft, and the quality and weight of the dust. The risk run by the flying personnel in flying inland 20 feet above the tree-tops with a single-engined plane is not usually appreciated. Flying at this height is essential at this stage, because if the dust is discharged at a greater height,

approximately forty per cent. of the quantity is lost, and the remainder is spread over a larger area with subsequent loss of the desired effect.

Until tree dusting has reached a high stage of development, it is considered unwise to continue in the hazardous occupation of flying over any area except small islands or shorelines.

Instruction.

The 1929 period saw considerable progress in the development of the Service Training School, both from the high standard of pupils and the organization of the school in general.

A survey of various reports regarding the innumerable aeroplane accidents in America reveals a greater proportion due to error of judgment or the human factor. While this speaks well for aeronautical design and mechanical advances made in aircraft construction, it puts the responsibility entirely on the shoulders of the man at the controls.

Instructors are better qualified to form a comprehensive judgment and to help weed out undesirables than the Director, who must judge from recommendations or through the prescribed evolutions, in approximately one hour's time. The selection of a pilot on the brief showing of his test is not a guarantee that he will be competent under all conditions. An instructor's experienced eye will quickly detect harmless idiosyncrasies or dangerous tendencies. In our school we look not so much for quick results as for permanent results.

Speed alone is not the prime requisite in our Service, or for that matter in commercial flying. Speed plus safety is the mark we have been shooting at.

The practical mechanical course in our shops at Sault Ste. Marie requires that our students have a thorough understanding of every part of plane and engine, its functions and the reason why it functions correctly or wrongly. Applicant pilots of our Service cannot have flying instruction until the Plant Superintendent passes them on their practical course.

In addition to this, when the school was organized arrangements were made for the pupils to have instruction on a similar basis to that of a military school, the pupils receiving ground instruction in navigation, meteorology, engines, aircraft and a thorough understanding of the Air Board Act and all regulations or orders of our Service.

Three De Haviland Gipsy Moths were transferred from the operating division to the school at Sioux Lookout where they remained until training was completed.

The policy adopted by this service of training its own pilots has been criticized from time to time by persons unfamiliar with the work, who allege that we train pilots to the exclusion of pilots already available and trained by flying clubs. Club methods of training are fairly well standardized to meet commercial requirements and many capable pupils are passed out who eventually become excellent commercial pilots.

The training, however, differs with respect to the requirements of this Service, and, consequently, pilots graduated from flying clubs are of little or no use to us because no matter how capable they were as club pupils they may know nothing of the work of this Service, and therefore, would have to fly one or two years under instruction before they could possibly be considered competent to assume complete charge of a suppression or detection aircraft. This Service has many capable engineers, junior and applicant pilots, with years of flying experience behind them, who are considered more competent in many respects than solo pupils of flying clubs, and therefore, it is only reasonable that our own

personnel should receive preference. No better example can be given than two pilots trained in the spring of 1928. These pilots have completed 1,291 hours and 949 hours, respectively, without mishap, during the last two operating seasons.

These two pilots were chosen after three years' experience in our Service because of their marked ability in almost every phase of the Service operations.

Though flying experience plays an important part in selecting pupils for flying training there are other very important factors to be considered, such as bush experience, seamanship, knowledge of the functions of the Forestry Branch, most of which cannot be learned other than by actual experience gained in this Service.

Fourteen pupils received *Ab Initio* training, of which five passed successfully and were appointed junior pilots. In addition to these, one pilot under this category, who is a member of the Forestry Branch, also qualified for his commercial license.

Two pilots received additional instruction on flying boats after gaining their commercial licenses on lighter machines.

Eight qualified pilots received instruction on machines, on which they had no previous experience.

Two pupils were turned down, after completing solos, as not being up to the standard required by the Service.

Six pupils who did not complete their training during 1929 will resume training at the commencement of the 1930 school.

658.45 hours were devoted to instruction. These hours show a considerable increase over the preceding year, brought about in view of the new regulations promulgated by the Department of National Defence, wherein the hours necessary for a commercial pilot's license increased from twenty to fifty hours.

The regulations laid down in the Air Board Act regarding qualifications for licensed engineers are so exacting that candidates can only obtain the required training by resorting to the very best facilities for instruction, which again can only be afforded by experience backed by up-to-date practical methods, good shop equipment, and actual flying operations. The high standard required has contributed in no small degree to the success of our flying operations in the past six years.

In the past three years this Service has graduated many competent Air Engineers.

Special Transportation.

A very limited amount of special transportation was carried out during the operating season of 1929. In June and July one Moth aircraft co-operated with the Department of National Defence in carrying out flights in connection with the arrangements, Treaty No. 9. Mr. Cain, Deputy Minister of Lands, the Provincial Commissioner, was flown from Remi Lake of the Provincial Air Service to the English River Post on the Albany River, Hudson Bay Posts of Ogoki, Fort Hope and Osnaburgh on the Albany River, Lansdowne Post on Attawapiskat Lake and the Hudson Bay Post on Bear Island of Trout Lake.

As in former years the Service co-operated with other departments, notably, the Department of Mines, Game and Fisheries, Provincial Police, Department of Health and the Red Cross Nursing Association.

Emergency flights were made in connection with urgent requests for the doctor at Sioux Lookout to visit remote settlements of Patricia in connection with urgent and first aid causes.

	1929	1928	1927	1926
<i>Flights.</i>				
Total number of flights	9,472	4,130	2,745	1,994
Average duration of flight	1.22 hrs.	1.47 hrs.	1.76 hrs.	1.46 hrs.
Average miles flown per flight	70.6	83	105	115
Average altitude	1,720 ft.	2,354 ft.	2,610 ft.	3,197 ft.
Average number of flights per day	33	17.9	13.8	10.6
Average number of flights per day per machine on days machines employed	3.9	2.55	2.10	2.11
Number of miles flown	669,423	342,343	287,305	230,991
<i>Load.</i>				
Total load-weight carried	7,586,368	4,258,984	3,888,091	3,249,372
Total operating load	6,171,649	3,495,552	3,170,178	2,589,959
Effective or useful load	1,414,719	763,432	717,913	659,413
<i>Passengers Carried.</i>				
Total number of passengers carried	2,672	2,606	2,268	1,636
Average number of passengers per flight . . . . .	.27	.63	.82	.82
Average number of passengers per machine	103	172	119	102
Total number of passengers and personnel carried	7,279	8,938	7,195	5,624
Machine days, one machine for one day, machines employed	2,336	1,614	1,307	944
Fair weather machine days, machine available and idle	644	754	661	793
Machine days, machines available and weather unfit for flying	456	805	615	797
Total number of machine days supplied by the Service	3,436	3,173	2,583	2,534
Number of times one machine unserviceable one day	328	161	84	117
Total possible machine days in the season	3,764	3,334	2,667	2,651
Number of patrols requisitioned	1,960	1,540	1,261	821
Number of times machines unable to complete patrol on account of machine trouble	24	16	12	20
Service patrol efficiency	90.45	95.2	96.85	95.59
Machine patrol efficiency	98.7	98.95	99.05	97.55

EFFICIENCY PROVINCIAL AIR SERVICE OPERATIONS, 1929

MONTH	Requisitioned	Attempted	Completed	Completed same day but delayed	Not completed same day	Percentage completed uninterrupted	Percentage completed same day but delayed	Mechanical causes	Weather
January	7	7	7	..	..	100.00	..	..	..
February	15	15	15	..	..	100.00	..	..	..
March	20	20	18	..	2	90.00	..	1	1
April	11	11	11	..	..	100.00	..	..	..
May	116	116	108	3	5	93.10	2.58	4	4
June	396	395	355	17	23	89.87	4.30	13	28
July	454	453	407	21	25	89.84	4.63	16	31
August	500	500	450	23	27	90.00	4.60	20	30
September	335	335	314	5	16	93.75	1.49	5	16
October	102	102	96	3	3	94.11	2.94	3	3
November	4	4	4	..	..	100.00	..	..	..
.....

HOURS FLOWN ON VARIOUS PHASES OF FLYING OPERATIONS

	1925		1926		1927		1928		1929	
	Hrs. Min.	Per cent.	Hrs. Min.	Per cent.	Hrs. Min.	Per cent.	Hrs. Min.	Per cent.	Hrs. Min.	Per cent.
Fire Detection.....	1,440.40	52.5	1,957.44	55.4	2,170.53	44.7	1,736.10	28.4	3,070.30	26.4
Fire Suppression.....	155.45	5.7	640.17	18.1	948.00	19.5	1,717.55	28.1	4,592.55	39.5
Sketching.....	244.42	8.9	142.56	4.0	523.00	10.8	583.20	9.5	297.05	2.6
Photography.....	53.15	1.9	99.25	2.8	173.00	3.6	163.15	2.7	207.45	1.8
Special Transportation.....	197.40	7.2	194.50	5.5	127.10	2.6	185.10	3.0	246.05	2.1
Observer's Instruction.....	26.50	0.9	17.14	0.5	31.35	.07	.....	.....	4.50	.04
Forced Landings.....	36.04	1.3	29.25	0.8	17.50	.04	30.35	0.5	222.30	1.9
Ferrying.....	330.41	12.0	234.36	6.6	240.25	4.9	345.15	5.6	523.10	4.5
Operation, Administration, Inspection.....	62.05	2.2	62.10	1.8	426.35	8.8	1,016.20	16.6	1,584.40	13.7
Dusting Operations.....	.....	.....	.....	.....	.....	.....	20.10	0.3	21.25	.18
Test Flights.....	47.27	1.7	42.55	1.2	65.30	1.3	117.35	1.9	172.20	1.5
Flying Instruction and Demonstration.....	144.43	5.7	117.50	3.5	137.05	2.8	192.55	3.0	658.45	5.6
Totals.....	2,739.52	.....	3,539.22	.....	4,861.03	.....	6,108.40	.....	11,602.00	.....

III.—REPORT OF LIAISON OFFICER

During the season of 1929 the following lines of work were undertaken:—

- (1) Aerial Forest Type Mapping.
- (2) Aerial Photography.
- (3) Radio Communication.
- (4) Miscellaneous Investigations.

1. Aerial Forest Type Mapping.

Two projects of this class were carried on during the past season (*a*) North-east of the Nipigon Reserve; (*b*) in Haliburton County.

Of these the Nipigon, comprising an area of 12,000 square miles was undertaken as a preliminary inventory of timber resources in this section of the Province. The area in question which can be more nearly described as extending from the National Transcontinental Railway to the Albany, between the eastern boundary line of the Nipigon Forest Reserve and Lynx Station, comprises the southwesterly extension of the northern spruce, balsam forest type typical of the clay belt country. Of the allotted 8,000 miles for the present season some 2,000 were completed in 120 hours' flying.

Aerial Forest Typing in Haliburton County was not undertaken until late in the season. The area covered comprised eight townships. Timbered conditions on the whole appeared good, the stand being mainly southern hardwood type. Some evidences of moderate to severe culling for softwoods were noted, but owing to lack of experience in the Aerial Classification of stands of this nature, definite conclusions could not be given.

2. Photographic Survey.

With the purchase of a Vedette flying boat, the use of vertical photographs for Aerial Survey became more advisable. That vertical photos provide maximum detail has long been recognized and has in consequence prejudiced aerial photographic survey to their use. Opposed to this factor of quality, however, there has been the detriment of high cost.

In considering the effect of better aircraft and camera equipment on cost, it may be of interest to compare the area covered by one hundred exposures—the standard size of roll film used for this work averages the above number—with various combinations of new and old equipment. Using this unit, it has been found that vertical photos providing the maximum of survey information when taken with the Fairchild camera from the Vedette's working height—ten thousand feet—cover an almost even hundred square miles (94.5 is the exact calculated figure). Under the same working conditions the older Kodak camera will cover less than forty square miles. At five thousand feet—the working height of the older H.S.2L., these areas are roughly one-quarter as great, namely, 23.6 for the Fairchild and 9.8 for the Kodak. Since cost for surveys of this kind is generally related to area covered, the value of the newer equipment for this type of work may well be considered as relative to the same figure.

During the past season, Aerial Photographic Survey was used in five separate operations comprising the following areas:—

- (1) The Sibley Forest Reserve.
- (2) Addition to the Mississagi Reserve.
- (3) Addition to the Timagami Forest Reserve.
- (4) Strip along the Lake Superior shore line, from Nipigon to Rossport.
- (5) North-east of the Nipigon Forest Reserve.

Of these areas the first four were based on vertical photos, the fifth on obliques. The total area covered is approximately 2,000 sq. miles, the total flying time 218 hours.

In general the Aerial Survey programme showed considerable progress and although the loss of machines due to the severe hazard conditions, seriously crippled operations, favourable weather towards the end of the season made it possible to complete all but two of the season's allotted operations.

3. *Radio Communication.*

During the past season, a total of eighteen stations were operated. These may be divided into three groups corresponding to the Hudson, Cochrane and North Bay Districts.

In the Hudson, a total of thirteen stations (an addition of six) were operated, including two, one at Gold Pines and another at Sioux Lookout which were used very largely for commercial work. In the Cochrane District, two new stations were operated and in the North Bay three, being one more than in the previous season.

In point of use there is considerable difference between the Eastern and Western stations. In the Hudson Inspectorate, communication is largely used between District and Ranger Headquarters, this service being required because of the lack of land line communication of any kind throughout the area in question. For the same reason, the demand and necessity of supplying a commercial service has also arisen.

In the two small eastern units, however, the use of radio is more definitely restricted to a specialized type of communication, in particular to communication with lookout towers. There is at present very little call for a commercial service in either of the Eastern areas since land lines have already been generally constructed throughout this territory prior to the establishment of the Department's present organization.

In addition to the land stations described above, which are classified as "permanent" as distinguished from portable, the radio service has also designed and constructed two other types of radio apparatus which it is expected will be of value in the Branch's work. These are (a) a portable set; (b) an aerial set.

In describing the portable set, it should perhaps be noted that the permanent sets already dealt with, since their total weight of six hundred odd pounds can be broken down into units of about two hundred pounds or less, are themselves "portable." The sets at present under consideration, however, have been especially designed for light weight and intermittent service. Two types have been developed (1) a battery operated set (2) a gas-engine-generator set. Because of its relative simplicity, the battery set was completed first and was given an actual test on fire-fighting operations during the present season. The set was found to have ample power and maintained schedules without failure. The gas-engine-generator set was completed and while it has not been actually tried on a fire-fighting operation, has been given an equivalent test as regards distance and general working conditions. The set operated with entire satisfaction.

In considering these two types, it might be noted that the complete weight

of either is less than one hundred pounds, the battery set being somewhat lighter. In point of initial cost, the power driven set is at a disadvantage, while in point of upkeep, the battery set suffers. On the whole, it would appear that the power-driven outfit will be more generally desirable.

The aerial set which was designed and tested during the past season differs from all other Department equipment in the fact that it provides one way communication only. Considerable difficulty was encountered in obtaining material for this apparatus owing to its special nature and also to the general rapid development of the radio industry. During the present season, this delay was particularly unfortunate since it led to the arrival of this material coinciding with a period of very high fire hazard and consequent flying activity during which it was impossible to lay up a machine long enough to permit of an installation being made. The equipment did not therefore receive a working test until near the close of the season. The test was successful and it is now considered that a much less powerful apparatus would supply all requirements. Present indications are that it would be desirable to lighten the apparatus and supply two-way communication.

Miscellaneous Investigations.

(a) A method of providing data for the construction of contour maps from aerial survey photos was investigated in a portion of the Georgian Bay District during the month of September. Results have not as yet been completed, but the field work proved both rapid and simple. The method which comprises features of outstanding worth is based on the use of surveying aneroids. Position is fixed on photographic prints taken into the field, thus eliminating the necessity of chainage.

(b) Little progress was made in the matter of tower horizon maps. The Kodak Company have, however, undertaken to conduct a series of investigations as to the most suitable apparatus.

COMMERCIAL TRAFFIC

COMMERCIAL STATIONS, HUDSON DISTRICT

NOV. 1ST, 1928, TO OCT. 31ST, 1929

Stations	Words Transmitted	Words Received	Total Words	Radio Tariff
Red Lake.....	35,647	32,285	67,932	2,367.20
Jackson-Manion.....	25,792	16,898	42,690	1,722.10
Gold Pines.....	28,449	33,479	61,928	1,747.90
Sioux Lookout.....	67,748	74,974	142,722	4,373.90
Totals.....	157,636	157,636	315,272	10,211.10

Total Commercial Traffic..... 315,272 words

COMPARISON OF TRAFFIC, 1927-1928-1929

IN WORDS

TOTAL TRAFFIC—1929—ALL STATIONS

	Commercial	Non-Commercial	Total
Hudson District Commercial Stations.....	315,272	45,772	361,044
Cochrane District Stations.....	.....	7,028	7,028
Temiskaming District Stations.....	.....	16,430	16,430
Hudson District Forestry Stations.....	9,546	151,935	161,481
Grand Total.....	.....	.....	545,983

1927
58,2391928
233,8551929
545,983

PER CENT. INCREASES

1928 on 1927
303%1929 on 1928
133%1929 on 1927
837%

IV.—REFORESTATION

ST. WILLIAMS

In order to simplify matters, nursery operations carried on at the two stations will be dealt with collectively, since Station No. 2, to date, is purely a transplant nursery, and all stock that is developed at that point is eventually transferred to Station No. 1 for final distribution. Special consideration will, later on in this report, be given Station No. 2 on matters concerning property additions and development.

During the fall of 1928 and the winter months of 1929, the permanent staff were mainly employed on silvicultural work, involving woodlot and plantation improvement cuttings. In addition to these activities, and when rough weather prevented outside work, all working tools were repaired, implements repainted, 1,158 shipping crates constructed, and all other work of a preparatory nature for the spring season was affected. Also in excess of 600,000 Carolina Poplar cuttings were prepared and heeled in ready for disposal. Nursery operations started rather earlier than usual—on March 18th. Lifting of nursery stock commenced immediately and by the end of the month a major portion of the trees were ready for distribution.

Approximately 6,376,000 trees were lifted for permanent distribution to other points.

(1) Nursery Operations

(a) Fertilizers.

Since the recent acquisition of Station No. 2 at Turkey Point, an area approximating 100 acres has been converted into a transplant nursery. This increase in acreage suitable for nursery purposes relieves the necessity of heavy annual applications of fertilizers, since a longer rotation permits the alternate use of green manure crops.

Thirty acres of rye and vetch were ploughed under this year at Station No. 2, while 45 acres of Soy beans were turned down for their fertilizing value at Station No. 1.

RECORD OF FERTILIZERS APPLIED

Nov. 1ST, 1928, to Oct. 31ST, 1929

Lot	Animal (tons)	Rock Phos. (lbs.)	Nitrate (lbs.)	Bonemeal (lbs.)
Total.....	393½	3,600	950	600

(b) Seed.

Local tree seed collected this year exceeded all former gatherings.

Jack Pine cones collected from older private plantations within Norfolk County and neighbouring counties totalled 753 bushels. These cones were purchased directly from the plantation owners, who in many cases made enough money to more than pay off the annual farm taxes.

Only 34½ bushels of Scotch Pine cones were purchased, as most of the seed of this species is being procured in Europe from different, definite origins. A concerted effort is being put forth to find just what strains of Scotch Pine are best suited to our widely varying conditions.

An increasing demand for walnut planting stock has led to the planting of an additional quantity of nuts of this species. Twelve hundred and forty-eight bushels of Black Walnuts were purchased this year at sixty cents per bushel—nuts with husks on. Individual trees have yielded as high as twenty-five bushels of nuts and are a real source of revenue to their owners.

TREE SEED ON HAND—FALL, 1929

Species:	Amount in Pounds
Red Pine.....	13
White Pine.....	455
Scotch Pine.....	25
Jack Pine.....	567
White Spruce.....	447
Norway Spruce.....	50
White Cedar.....	15
Red Cedar.....	2
Austrian Pine.....	12
European Larch.....	6
Balsam.....	12¾
Hemlock.....	5
Sitka Spruce.....	10

1,619¾ lbs.

(c) Seed Beds.

An early "freeze-up" on the 27th of November brought nursery operations to a standstill. Ordinarily it has been quite possible to continue fall seeding well into the month of December.

As a result of this abnormal condition, the schedule of fall seeding was not completed and several hundred beds will of necessity have to be sown in the spring of 1930.

Seed sown throughout the year is herewith tabulated under two headings:—

(a) Coniferous seed sown.

(b) Deciduous seed sown.

CONIFEROUS SEED SOWN DURING 1929

Spring		Fall	
Species	Beds Sown	Species	Beds Sown
Scotch Pine.....	3	White Pine.....	200
Scotch Pine.....	6	Red Pine.....	200
Red Pine.....	6	Scotch Pine.....	48
White Pine.....	6	Scotch Pine.....	48
		Scotch Pine.....	48
		Scotch Pine.....	46
		Jack Pine.....	190
		White Spruce.....	90
		White Spruce.....	95
		Norway Spruce.....	120
		White Cedar.....	40
		Red Cedar.....	9
		European Larch.....	39
		Hemlock.....	20
	21		1,193

HARDWOODS SOWN DURING 1929

Species	Amount Sown	
	Pounds	Bushels
Soft Maple.....	200	....
Hickory Nuts.....	....	8
Yellow Birch.....	1	....
Black Locust.....	12	....
Hard Maple.....	60	....
Walnuts.....	....	1,248
Red Oak.....	....	10
Total.....	273 lbs.	1,266 bush.

(d) Transplanting

Concurrent with the distribution of permanent planting stock, transplanting of one and two-year old seedlings from seed-beds to nursery lines was carried on until the end of May.

A total of 9,074,000 seedlings were lifted and lined out.

Transplants shipped to other Stations

The number of transplants shipped to other stations is as follows:—

ORONO:

Jack Pine.....	150,000
Austrian Pine.....	10,000
Pitch Pine.....	10,000

MIDHURST:

Austrian Pine.....	25,000
Pitch Pine.....	25,000

Record of Nursery Stock Lifted—1929

CONIFERS		HARDWOODS	
Species	Number	Species	Number
White Pine.....	950,000	Walnut.....	9,000
Red Pine.....	900,000	White Ash.....	174,000
Scotch Pine.....	465,000	Hard Maple.....	32,000
Jack Pine.....	400,000	Soft Maple.....	308,000
White Spruce.....	1,020,000	Black Cherry.....	34,000
Norway Spruce.....	480,000	Black Locust.....	35,000
Japanese Larch.....	300,000	Birch.....	13,000
White Cedar.....	118,000	Elm.....	300,000
Hemlock.....	7,000	Red Oak.....	40,000
		Rooted Poplar.....	69,000
		Poplar Cuttings.....	675,000
		Willow Cuttings.....	47,000
	<hr/>		<hr/>
	4,640,000		1,736,000
Summary—			
Conifers.....		4,640,000	
Hardwoods.....		1,736,000	
		<hr/>	
Total.....		6,376,000	

(e) Nursery Stock available for Spring (1930) Shipping

CONIFERS		HARDWOODS	
Species	Total	Species	Total
White Pine.....	655,000	White Ash.....	134,000
Red Pine.....	1,094,000	Hard Maple.....	28,000
Scotch Pine.....	818,000	Soft Maple.....	190,000
Jack Pine.....	646,000	Walnut.....	35,000
White Spruce.....	950,000	Japanese Walnut.....	5,000
Norway Spruce.....	547,000	Oak.....	4,000
White Cedar.....	215,000	Black Cherry.....	31,000
Red Cedar.....	11,000	Basswood.....	8,000
European Larch.....		Rooted Poplar.....	54,000
Siberian Larch.....		Poplar Cuttings.....	400,000
Korean Larch.....	19,000	Willow.....	30,000
		Elm.....	126,000
	<hr/>		<hr/>
	4,955,000		1,045,000
Summary—			
Conifers.....		4,955,000	
Hardwoods.....		1,045,000	
		<hr/>	
Total.....		6,000,000	

(2) Improvements

Road extension at Station No. 2 was carried on during the summer months. Two and one-quarter miles of new road were graded and gravelled—three loads wide. There remains now but three-quarters of a mile of main road to construct to complete the road-building schedule as outlined in the original survey.

One mile of old road was resurfaced and maintenance of all main drives rigidly adhered to.

We are pleased to report that roads constructed in the years 1927 and 1928 are standing up well under an increasingly heavy usage. Particularly is this true of Turkey Point Hill, which, prior to cutting down and averaging the grade, was a menace to traffic.

Hydro-electric has been installed at Station No. 2. The barn, implement shed and foreman's residence is equipped with electric lighting and yard lamps have been placed at serviceable points.

Thirty acres of land suitable for nursery purposes were cleaned up, stumped and seeded to rye and vetch which will be ploughed under in the spring of 1930. The area in question has, moreover, been subdivided into six 5-acre compartments, and next spring it is the intention to establish permanent windbreaks delimiting each block.

Considerable building was done at Station No. 1. Three old barns which were on the property when it was first purchased, and which have been an eyesore in an otherwise beautiful setting, were torn down, and the material, as much as was serviceable, used over again in the construction of a new implement shed.

Other buildings erected during the year include a barn, 36 feet by 54 feet, and a standing stable, 22 feet by 44 feet in dimension. All of these buildings have hip roofs, providing thereby additional inside storage space.

(3) *Permanent Planting*

Extension in the programme of experimental plantations at Station No. 2 was carried out. All blanks, due principally to an abnormally dry summer, were replanted. Seven new two-acre plots were surveyed, cleaned of scrub oak and completed the planting of the White Spruce group. This group now comprises twenty-four plantations, each exactly two acres in size. White Spruce forms the base species for each plantation. Different spacing is used and mixed planting with other conifers and hardwoods individualize each of the twenty-four plots.

A detailed record of each plantation is maintained on all matters concerning origin and cost of planting material, cost of preparing the site, cost of spotting, planting and any subsequent fillings where losses may demand that such be made.

In preparation for next spring's planting of the Red Pine group, twenty-one two-acre plots were surveyed and furrowed, as in the case of the White Spruce group. Red Pine will be the base species used in each of these experimental plots.

A 100-acre plot known as the "Hunt" property was recently added to the Crown holdings at Station No. 2. This area had previously been reforested to Scotch Pine, and it was felt that results would be better assured if the area were converted into a mixed planting. In accordance, therefore, every other row of the existent young Scotch Pine was cut out and 32,500 four-year-old Red Pine established in the gaps thus created.

Reclamation planting on blow sand and other sides subject to erosion entailed the setting-out of 7,300 Rooted Poplar, 298,000 Carolina Poplar cuttings, 250 Rooted Willow, 500 White Ash, 5,300 Japanese Larch, 400 Red Oak, 100 Beach, 10,500 Black Locust, 400 Birch and 8,000 Jack Pine.

Two new plantations were established at Station No. 1, a total area of 22.4 acres being planted to 25,700 Red Pine.

On account of flooding it was necessary to plant 8,000 Rooted Carolina Poplar and 4,100 White Ash to replace Red and White Pine losses in depressions at various points on Plantation No. 38.

Returns from thinnings that have been made from time to time in older plantations reveal some very interesting figures.

History of Plantations.

Price affixations are governed by the actual money receipts derived from the sale of wood, and an equivalent of the current price paid for seed-bed stakes.

Material for seed-bed construction has in previous years been purchased from local merchants, and entailed a considerable expenditure of money. Con-

version of the product from thinnings may be used and involves an important factor in cutting down the annual expenditure. At the same time these possible uses of thinnings open up a local avenue for consumption, and permit the inception of yield at an exceptionally early period in the history of the various plantations.

PERMANENT PLANTING

Species:	Number
Poplar "Rooted".....	30,500
Poplar Cuttings.....	298,000
Willow "Rooted".....	250
Willow Cuttings.....	30,000
White Ash.....	5,950
Red Pine.....	60,760
White Pine.....	17,470
Scotch Pine.....	1,500
Jack Pine.....	8,000
Larch.....	6,150
Red Oak.....	1,750
Beech.....	100
Black Locust.....	10,500
Birch.....	21,130
Total.....	492,060

(4) *Protection*

Fire.

Four miles of fire lines were established at Station No. 1. These fire-roads were made twenty-four feet wide, while intermediate cross lines were ploughed to a width of sixteen feet.

All existing fire-roads at Station No. 1 were re-ploughed and cultivated.

Two small fires occurred on the property, but were immediately observed by the lookout and were brought under control in a very short time. The damage wrought was negligible.

Several fires of varying proportions were reported burning on farm woodlots. In each case the call for assistance was immediately responded to and the menace speedily overcome.

The fire hazard locally was never worse than during the recent summer, but we are pleased to report that very little loss to standing timber resulted. Not one report of plantation loss from fire was recorded.

Animals.

The policy in recent years of permitting no debris to accumulate in and about the nursery proper appears to be most effective in minimizing damage wrought by mice. By removing needles and leaf droppings each and every year, nesting places for rodents are lacking. In any event very little damage from mice was observed during 1929.

Rabbits are not so plentiful and very little damage from girdling is apparent.

Twice during the year a drive was made on the red squirrels. In this way their numbers are kept down and balanced with the available natural food. When squirrels are very numerous and an off year for nuts occurs, these rodents become a pest in that they girdle Scotch Pine for the inner bark, as well as ravage the terminal buds of certain conifers.

Insects.

White Pine weevil control was continued more intensively than ever. The weevil control section commenced their work on June 24th, a trifle earlier than in 1928, and finished on August 13th.

All White Pine plantations were thoroughly inspected and all infected tops removed. It was found necessary to work some plantations three times in a concerted effort that not one weeviled top be overlooked.

A new type of container was devised this year with a view of making it absolutely certain that no insects escaped after collection. This precaution was felt to be necessary as the older type of wooden boxes formerly used either opened up in dry weather, or swelled to bursting point during a rainy spell.

The new boxes are three feet by three feet by six feet in size and are constructed of galvanized metal, built on a rigid frame of cedar.

After the metal containers are filled with weeviled tops, galvanized screening is placed over the opening and carefully soldered fast. These boxes are placed at different points in the various plantations in order that the ever-present insect that parasitizes on the weevil may be more widely dispersed and be more effective in assisting to stamp out a pest which is one of the most damaging factors working against the development of White Pine plantations.

With reference to the tabulated record on weevil control which follows, it would appear that 1929 was an exceptionally bad year. I am inclined, however, to put the increase in the number of diseased tops collected, down to a more thorough and repeated operation. In any event, it is impossible to draw conclusions until 1930 weeviling has been effected in the same painstaking manner as that of this year.

Disease.

Chestnut blight "*Endothia parasitica*" is becoming very prevalent. Chestnut nursery stock is no longer being grown for disposal, as it would appear foolish to grow and distribute a species that is almost certain to be subsequently destroyed by this rampant disease.

One has but to listen to the crackling of dead chestnut stems to be convinced that the Sweet Chestnut of Southern Ontario is doomed.

Again, our White Pine holds the unenviable status of being susceptible to fungi as well as insect ravage. The White Pine Blister rust is too well known to warrant full description.

Eradication of members of the family *Ribes*, however, does present a most tangible procedure in terminating the development of this fungi before it reaches the stage damaging to White Pine.

The *Ribes* eradication section commenced work on July 20th and finished on September 21st, the working time being 1,617 hours.

(5) *Woodlot Improvement*

To a major extent woodlot improvement was carried on during the dormant months and entailed the removal of all inferior species as a preparatory operation to the reinstatement of such species as were adapted to existent site and soil conditions.

The principal species cut out were members of the Black Oak family. Growing, as it does, on very light sandy soil, Black Oak attains but a small height and diameter size when heart rot sets in. Such trees invariably break over in a short time and the remaining stubs coppice. This coppice in turn develops poorly and again becomes diseased. Such a condition has been going on for years and will continue "ad infinitum" without there being created a stand of any great commercial value.

As a remedial measure it is therefore considered essential to remove all Black Oak and convert the same into fuel-wood and some lumber. Brush for the protection of seed-beds is also procured, and although not noted on the yield side of our ledger, its value must not be overlooked.

An hourly cost record is strictly maintained in connection with all woodlot improvement, including felling charges, brush disposal, pruning of desirable trees, such as White Oak and White Pine, teaming and trucking, milling and conversion operations of polewood into stove and cordwood.

(6) *Publicity*

Reforestation exhibits at fall fairs were made at Port Dover, Springfield, St. Williams, Norwich, Tillsonburg and Simcoe.

These exhibits reach the people who are really interested in tree-planting. Requests for literature and information during and since the demonstrations indicate conclusively their value.

Eight addresses given before clubs and community gatherings appear to have been acceptable and open discussion which invariably follows each address clears up points of individual interest.

Seasonable hints and advice submitted to local newspapers serve as a guide to those either actively engaged in reforestation or contemplating the same. Through the medium of the publishers' exchange, these articles radiate to other widely dispersed points.

The various chambers of commerce in south-western Ontario are taking kindly to matters pertaining to tree planting and have incorporated a reforestation committee, whose office it is to assist and advise individual and municipal activities in setting out new plantations.

Questions of proper handling of farm woodlots and fire protection are also included as part of these committees' functions.

Organized picnics and other gatherings at the Norfolk Forest Station provide recreation and first-hand information to the public.

ORONO

Unusual weather conditions militated to a considerable degree against the best growth in nursery stock. Periods of exceedingly dry weather were followed by periods of immoderate precipitation. The unusually heavy rainfall of July, accompanied by high temperatures made damping-off a constant menace to coniferous seedlings.

(1) *Nursery Practice*

(a) *Fertilizers.*

Fertilizers used during the year were as follows:

ANIMAL		MINERAL			
Manure Tons	Dried Blood Lbs.	Acid Phosphate Lbs.	Nitrate of Soda Lbs.	Sulphate of Ammonia Lbs.	Muriate of Potash Lbs.
250	1,500	625	250	750	850

In addition an area of some ten acres which had been seeded down to sweet clover was ploughed and the growth turned under. Splendid results were obtained and a much more friable, easily handled soil resulted, aside from the fertilizing value of the dense leguminous crop turned under.

(b) *Seed.*

An additional supply of seed comprising a total of 190 bushels, which was received too late for planting, was stratified for spring sowing.

(c) *Seed Beds.*

During the year a total of 706 coniferous seed beds were sown and 532 bushels of hardwood seed planted, as follows:

CONIFEROUS SEED SOWN DURING 1929

SPRING		FALL	
Species	Beds Sown	Species	Beds Sown
Jack Pine.....	50	White Cedar.....	49
Red Pine.....	5	Red Cedar.....	5
Scotch Pine.....	50	Jack Pine.....	77
		Red Pine.....	148
		Scotch Pine.....	25
		White Pine.....	160
		Norway Spruce.....	60
		White Spruce.....	77
Totals.....	105 Beds		601 Beds

The use of sub-soil as a germination blanket has proven to be advantageous in varying degrees with the different species but the extra labour involved has led to its abandonment in most species. Experiments on a small scale, however, would indicate that its use is highly desirable in the case of Red Pine. Large scale experiments are being carried on with the 601 beds sown this fall with the idea of getting definite data for all of the coniferous species sown.

Large scale experiments were also undertaken with a view to ascertaining the effects of fertilizers applied at various depths below the seed. This latter, in view of the very striking results obtained at the Savenac Nursery, U.S. Forest Service.

SOWING OF HARDWOOD SEED

Species	Total amount Seed Sown in Bushels
White Ash.....	20
Basswood.....	3
Butternut.....	73
White Elm.....	4
Bitternut Hickory.....	1
White Hickory.....	8
Hard Maple.....	21
Silver Maple.....	49
Red Oak.....	30
Walnut.....	323
Total.....	532 bush.

(d) Transplanting.

In the spring a total of 3,438,000 coniferous seedlings were lifted from the seed beds and transplanted, as well as 62,000 coniferous seedlings, which were received from St. Williams. A total of 110,000 deciduous seedlings and 5,000 poplar cuttings were also set out in transplant lines.

CONIFERS TRANSPLANTED

White Pine.....	748,000
Red Pine.....	1,238,000
Scotch Pine (St. Williams-Swedish Seed).....	10,000
Scotch Pine.....	170,000
Jack Pine.....	20,000
Pitch Pine (St. Williams).....	16,000
Austrian Pine (St. Williams).....	16,000
White Spruce.....	590,000
Norway Spruce.....	302,000
White Cedar.....	306,000
Total.....	3,416,000

HARDWOODS TRANSPLANTED

White Ash.....	60,000
Silver Maple.....	50,000
Carolina Poplar Cuttings.....	5,000
Total.....	115,000

(e) For Distribution 1930.

CONIFERS

Species:		
White Cedar.....	500,000	
Larch.....		
Jack Pine.....	150,000	
Red Pine.....	500,000	
Scotch Pine.....	90,000	
White Pine.....	855,000	
Norway Spruce.....	450,000	
White Spruce.....	600,000	
		3,145,000

HARDWOODS

Species:		
White Ash.....	221,000	
Butternut.....	15,000	
White Elm.....	5,000	
Hard Maple.....	4,000	
Silver Maple.....	125,900	
Walnuts.....	33,000	
		403,900

CUTTINGS

Species:		
Carolina Poplar.....	25,000	
White Willow.....	25,000	
		50,000
Grand Total.....		3,598,900

*(2) Improvements**Irrigation.*

An additional pump base was built in the pump house, and an electric pump installed to supplement the gasoline engine driven pump already in use. A new four-inch intake pipe was installed and a connection was made with the

three-inch outlet from the other pump with a second three-inch check valve set in the line. The pump, which is of the single stage rotary type, powered with a 25 H.P. three-phase motor (Century), is proving very satisfactory.

Roads.

In the spring an agreement was entered into with the Canadian National Railways whereby we obtained a private crossing through the right-of-way to the gravel pit from which we obtain all of our gravel. The crossing which necessitated the construction of a square culvert with 18-inch inside dimensions by 16 feet long and a bridge 10 feet by 16 feet wide, shortens our haul from the pit from one mile each way to a few yards. This crossing right-of-way was obtained for the nominal rental of \$1.00 per year.

During the summer, $2\frac{1}{2}$ miles of township road were taken over from Clarke Township for maintenance purposes. This road, which abuts the nursery on the west side for its full length and, in part, divides the nursery into the north and south sections, was graded up and gravelled.

During the early autumn, County Road No. 47, which is a main road from Newcastle to Lindsay was paved from Newcastle to Orono. In the course of the construction work a grade was created which necessitated an entirely new approach from the nursery to the village street. A fill of eight feet was necessary at the approach to the paved road and from that to a two-foot fill at a distance of two hundred feet. The resultant approach to the village is a great improvement over the former curved approaches. The sides of the grade, which is in places two to twelve feet high, were protected by posts on which was erected a heavy, thirty-inch wooden highway guard.

(3) *Permanent Planting*

Areas on the hillsides in the southern section of the nursery were permanently planted to the following:

Area No. 1—4 acres:

White Pine.....	2,500
Red Pine.....	2,500
Trees planted alternate in the row.	

Area No. 2—2 acres:

White Spruce.....	1,250
European Larch.....	1,250
Trees planted alternate in the row.	

In addition to nursery plantations a determined effort was made to secure a soil cover on the blow sand area comprising some twenty acres of the Manvers Township Demonstration Plot at Bethany in Durham County. The fence line on the windward side of this plot cuts squarely across the centre of a blow sand area, comprising in all, some forty acres. As a result coniferous transplants are either blown out by the roots or completely buried before they get a chance to develop, while Carolina Poplar and Willow cuttings have the tender young buds and shoots beaten to pieces by the drifting sand before they can harden.

This year a number of rooted Carolina Poplars were planted along the fence line and wide bands of the same material were established at frequent intervals across the wind direction. The spaces between these bands were then planted with Red, Scotch and Jack pine, a three-foot by three-foot spacing being used

throughout. In all, 25,000 trees and rooted poplar were planted, in addition to 10,000 poplar cuttings, as follows:

Jack Pine.....	10,000
Scotch Pine.....	5,000
Red Pine.....	5,000
Carolina Poplar (cuttings).....	10,000
Carolina Poplar (rooted).....	5,000

(4) *Protection*

Animal.

Mice, squirrels and hares have proven very destructive during the past season. Mice and hares by girdling trees in the plantations and squirrels by digging up and carrying off walnuts and butternuts which had been dibbled-in. Shooting is apparently the only protection from squirrels and hares and cutting the grass in the young plantations which have not a closed crown cover, with scythes, is proving effective with mice.

Perhaps the worst nuisance with which we have to contend is crows. These pests seek out the areas where nuts are planted, especially butternuts, and as the cotyledons raise the soil in the spring as they begin to sprout, the crows dig down to the nut and devour the kernel. They even do the same with the white ash and hard maple when these first appear. Shooting is the only remedy.

Insects.

The white pine weevil was observed in our plantations for the first time this summer. A few jack pines were attacked both on the nursery and in the Clarke Township Demonstration Plot. The leaders of infested trees were cut and burned.

June bug larvae caused considerable damage to plantations on the Durham Forest. These grubs worked in the grass roots, killing both the grass and the small, planted trees with which they came in contact. In numerous places, areas of several square yards could be stripped bare of sod with the foot.

Diseases.

White Pine Blister Rust.—An area of white pine plantation, some fifteen years old, situated one-half mile west of the nursery, was found to be infected with White Pine Blister Rust. Three men, under supervision, cut out and destroyed the diseased trees.

The Squair Plantation in Darlington Township, some three miles west of the nursery, was opened up and all infected trees marked for removal this winter.

Scotch Pine Gall.—An infection of Scotch Pine Gall was discovered on the plantation of Professor C. B. Sissons by Mr. MacCallum, Forest Pathologist of the Federal Department of Agriculture. This plantation, which immediately adjoins the nursery at the south-east corner is fifteen years of age. All trees badly infected were cut out and destroyed, while, where the infection was very light, the branches containing galls were removed and the trees left for observation.

(5) *Woodlot Improvement*

An area of twenty-five acres on the 200 acre cut-over block in Manvers was carefully cleared of slash during the winter. The brush was piled and burned. Reproduction is very promising in this area and a number of clumps of young white pine from fifteen to twenty years old is showing excellent growth.

(6) *Publicity*

The Orono Community Memorial Park which immediately abuts the nursery on the east has been increasingly popular this year, and we have co-operated with them in giving a suitable approach to both the park and the nursery from the village.

Several addresses were given at various gatherings, notably the Agricultural Short Courses in Durham and Peterborough Counties, the Orono Horticultural Society and the Teachers' Convention of Durham County. In the latter case, the 150 members of the convention were personally conducted through the nursery and the various phases of the work were explained in detail, after a short preliminary explanation had been given to the assembly at their place of meeting.

Judging by requests for repeats these talks are reaching interested persons.

Exhibits at fall fairs were extended this year and an endeavour was made to place the exhibit at strategic points. With this in view, widely separated points were chosen and exhibits placed at Sunderland in Ontario County, Markham in York County, Orono in Durham County, Roseneath and Campbellford in Northumberland County and Norwood in Peterborough County. Excellent results were obtained in every case. At Norwood, in addition to the exhibit being placed, a talk was given to the children of the senior rooms of the public school by request of the principal, when they came to the exhibit in a body, on the evening before the fair.

MIDHURST

(1) *Nursery Operations*

(a) *Fertilizers:*

Owing to the fact that this nursery is still in the stage of development—considerable new land being opened up each year, a large quantity of manure is required to build the soil up, physically as well as from a chemical standpoint.

In the old nursery land, as soon as the trees are lifted for shipping or transplanting, the ground is worked well, and manure, if on hand, is applied before the land is sown to a green manure crop. This consists of peas, soy beans or clover.

This year we inoculated all our green manure crop seed with nitro culture. This culture produced marked success in the forming of nitrogen-producing nodules on the sweet clover and peas, but we had no success with the formation of nodules on our soy beans.

These green crops are ploughed down in August. Well-rotted manure at the rate of twenty tons per acre for seed bed land and a lighter application for transplant land is then applied. The soil is then lightly "top" worked to destroy all weed seeds that may germinate.

Besides the above-mentioned fertilizers, a small quantity of artificial fertilizers was used more as an experiment. The soil at this nursery is a coarse sand and artificial fertilizers leach rapidly away as soon as they are made available.

The following artificial fertilizers were used:

Tankage.....	419 lbs.
Acid Phosphate.....	422 "
Lime.....	330 "
Bone Meal.....	442 "
Ground Blood.....	629 "
2-8-10.....	336 "
Nitrate of Soda.....	260 "
Sulphate of Ammonia.....	314 "
Carbonate of Potash.....	179 "
Muriate of Potash.....	140 "
Sulphate of Potash.....	81 "
Rock Phosphate.....	121 "

Besides the above fertilizers black muck is drawn from the swamps during the winter months, and placed on the nursery land at the rate of thirty loads to the acre. This humus, in addition to being rich in plant material, is a great improver of the soil physically, as it acts as a sponge and retains the soil moisture. This provides an excellent outlet for labour in the winter months; this season, 2,049 loads were placed on the land.

(b) *Seed.*

All seed is obtained from the extracting plant located at Angus, Ontario.

(c) *Seed Beds.*

The fall seed beds were put in from November 1st-16th, exceptionally fine calm weather being encountered for the operation. In the spring a few beds were put in, to fill in where poor germination from fall planting had occurred.

The following conifers and hardwoods were sown at this station:

CONIFERS		HARDWOODS	
Species:	Beds Sown	Species:	No. of Bushels
Red Pine.....	324	Red Oak.....	32
White Pine.....	491	Walnut.....	247
Scotch Pine.....	57	Butternut.....	5
Jack Pine.....	70	White Ash.....	10
Norway Spruce.....	40	Hard Maple.....	10
White Spruce.....	460	Black Cherry.....	6
White Cedar.....	37	Basswood.....	10
Red Cedar.....	4	Soft Maple.....	2
		Elm.....	10
Total.....	1,483 Beds		332 Bush.

The germination was very poor in our red pine and white spruce beds and only fair in the others.

Damping off was not prevalent to any great extent.

The climate seems to be too hard for the successful raising of basswood and hard maple trees at this station.

(d) *Transplanting.*

The following trees were lined out in the spring:

CONIFERS		HARDWOODS	
Species:	Number	Species	Number
Red Pine.....	2,467,134	Butternut.....	4,930
White Pine.....	860,939	Walnut.....	27,275
Jack Pine.....	22,887	White Elm.....	40,950
Austrian Pine.....	25,155	Rock Elm.....	550
Scotch Pine.....	110,500	Yellow Birch.....	375
White Spruce.....	440,482	White Birch.....	2,450
Norway Spruce.....	31,937	White Ash.....	26,225
White Cedar.....	776,359	Black Cherry.....	2,350
Hemlock.....	15,532	Basswood.....	175
		Red Oak.....	114,850
		Red Maple.....	9,250
		Silver Maple.....	40,200
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Total.....	4,750,925		269,580
Grand Total.....			5,020,505

(f) *Nursery stock in other stages of development:*

CONIFERS		HARDWOODS	
1 year old.....	4,832,339		200,000
2 years old.....	8,601,450		
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Grand Total...	13,433,789		

(2) *Improvements*

The grounds around the superintendent's house were graded and the roads were laid out. Later in the season the area was sown with grass seed and hedges put in.

A new double garage was erected in connection with this house. It was finished in artificial brick to match the house.

Considerable fencing was required to finish the fencing of the land recently acquired.

Considerable new nursery land has been opened up. This required many hedges to be laid out and planted this year.

The C.P.R. erected a large dam to form a reservoir on the stream flowing through our property. This is immediately below our reservoir.

A neat cement block pumping station was erected close to the reservoir. This system was connected up with six-inch mains with their 10,700-gallon tank at the Midhurst station.

A by-pass connection was provided between our mains and those of the C.P.R. to be used in case of an emergency.

The C.P.R. erected a rustic bridge over their reservoir, and did much to beautify the surroundings.

Considerable road work was done on the property this year.

(3) *Permanent Planting*

This year we planted 195,000 trees on waste land belonging to the C.P.R. around the Midhurst railway station; 25,000 of these were jack and scotch pine which were planted in the old gravel pit. This planting was done in exchange for land transferred to the government.

Twenty-five thousand trees were planted on our own property. Besides this planting, forty-two acre plots were laid out and planted this year. The purpose of these experimental plots is to decide the proper spacing and mixtures to be used in our plantations.

The total output of the nursery this season was 3,407,731.

(4) *Protection*

There was considerable loss due to winter browning in the two-year-old stock. This can only be alleviated by adequate hedge protection from the severe winds. Temporary hedges of quick-growing species, such as scotch pine have been planted in all wind areas.

The poplar canker (*Hypoxylon pruniatum*) still holds sway here and nothing can be done to offset this fungus. The large-toothed poplars which are attacked by this fungus are removed when disease is located in them.

The weevil is not prevalent here. When isolated ones are found attacking the leaders of the pines, they are immediately destroyed.

Several plantations, principally of red pine, were attacked by the pine needle eating Sawfly (*Neodiprion lecontei*). All plantations at this station were closely inspected during the caterpillar period. The caterpillars were cut off and destroyed, or the trees were sprayed with a stomach poison.

In order to keep our nursery lands clean, all roads and fireguards were kept free of weeds.

As a protection against fire, all fireguards were kept constantly cultivated, particularly close to the C.P.R. tracks. New fireguards were opened up around the main highways.

(5) *Woodlot Improvement*

Little work of this nature was done in the winter months of this year, as the operations at the muck pit employed most of the time. When the roads were not in a serviceable condition, the men were put at work removing the diseased poplar trees from the canker-infected areas. Some improvement cuttings were undertaken in the spruce swamp areas.

(6) *Publicity*

During the summer season several conventions visited the nursery, and the various phases of the work carried out at the nursery were carefully outlined to these people.

A package containing trees was distributed to all visitors at the Kiwanis meeting at Bigwin Inn this fall. Everyone was enthusiastic and interested in the policy of reforestation as carried on by this province.

During the summer months many visitors looked over the plant, and every courtesy was given them while showing them the various things of interest. At all times the benefits to be derived from reforestation were stressed.

In the fall the various fall and school fairs in the county were attended. Application forms and forestry literature were distributed to those showing interest. This year a delinescope, showing a film of the various nursery operations, created added interest in reforestation work.

SAND BANKS

Trees planted at the Sand Banks were as follows:—

Soft Maple.....	75
Butternut.....	12
White Ash.....	137
Elm.....	93
White Cedar.....	320
Mountain Ash.....	28
Locust.....	33,000
Poplar (Rooted).....	4,000
Poplar (Cuttings).....	58,450
Willow (Cuttings).....	20,000
Total.....	116,115
Willow Lengths planted.....	3 cords.

TREES FOR DISTRIBUTION—1930

CONIFERS		HARDWOODS	
Red Pine.....	36,000	White Ash.....	625
White Pine.....	95,264	Elm.....	242
Scotch Pine.....	96,500	Larch.....	39
Norway Spruce.....	4,114	Butternut.....	75
White Cedar.....	11,945	Soft Maple.....	2,680
Red Cedar.....	1,900		
Total.....	245,723		3,661
			245,723
Grand Total.....			249,384

KEMPTVILLE

The few remaining trees in this nursery were shipped during the spring and the nursery discontinued.

COUNTY FORESTS

HENDRIE (Simcoe County)

White Pine.....	77,500
Jack Pine.....	1,000
Red Oak.....	2,000
Soft Maple.....	500
	81,000

VIVIAN (York County)

Red Pine.....	42,000
White Pine.....	23,000
Scotch Pine.....	165,000
Jack Pine.....	5,000
White Spruce.....	10,000
Larch.....	20,000
White Ash.....	10,000
Soft Maple.....	10,000
Elm.....	10,000
Rooted Poplar.....	10,000
Poplar Cuttings.....	30,000
	335,000

NORTHUMBERLAND (Northumberland and Durham Counties)

White Pine.....	25,000
White Spruce.....	25,000
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	50,000

UXBRIDGE (Ontario County)

Red Pine.....	100,000
White Pine.....	121,000
Scotch Pine.....	58,000
Balsam.....	2,000
Jack Pine.....	54,000
Larch.....	30,500
Black Cherry.....	53,500
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	419,000

DURHAM (Northumberland and Durham Counties)

Red Pine.....	125,000
White Pine.....	75,000
Scotch Pine.....	25,000
Larch.....	50,000
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	275,000

LAROSE (Prescott and Russell Counties)

Red Pine.....	65,000
White Pine.....	80,000
White Cedar.....	20,000
White Spruce.....	10,000
Norway Spruce.....	20,000
Larch.....	35,000
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	230,000

VICTORIA (Victoria County)

Red Pine.....	107,000
White Pine.....	130,000
Scotch Pine.....	10,000
White Spruce.....	102,000
White Ash.....	2,000
	<hr/>
	351,000

ORR LAKE (Simcoe County)

Red Pine.....	188,174
White Pine.....	151,974
Larch.....	21,600
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	361,748

PRIVATE FOREST

OSLER

Red Pine.....	50,000
White Pine.....	50,000
Scotch Pine.....	25,000
White Spruce.....	25,000
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	150,000

NORTHERN PLANTATIONS

NAIRN (Sudbury)

Red Pine.....	150,000
White Pine.....	60,000
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	210,000

KIRKWOOD (Algoma)

Red Pine.....	400,000
White Pine.....	270,000
Scotch Pine.....	100,000
Jack Pine.....	50,000
White Spruce.....	150,000
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	970,000

LITTLE BLACKSTONE (Parry Sound)

Red Pine.....	500
White Pine.....	10,000
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	10,500

LAURIER (Parry Sound)

Red Pine.....	113,600
Jack Pine.....	1,400
Scotch Pine.....	23,000
White Spruce.....	46,000
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	184,000

DIVER (Nipissing)

Red Pine.....	160,000
White Pine.....	175,000
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	335,000

KIOSK (Nipissing)

Red Pine.....	40,000
White Pine.....	143,000
Scotch Pine.....	20,000
White Spruce.....	14,000
Norway Spruce.....	20,000
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	237,000

BRIDGELAND (Algoma)

White Spruce.....	75,000
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DEMONSTRATION PLOTS

New plots established:

Angus (Boy Scouts).....	90,000
Blackwater.....	11,000
Gwillimbury, North.....	8,000
Hillsdale.....	3,800
London (Kiwans Club).....	12,000
Long Branch.....	1,965
Oro.....	60,000
Perth.....	6,500
City of St. Thomas.....	21,650
Sandwich West.....	25,700
Unionville.....	2,500
Walkerton.....	1,100
Stouffville (York Co.).....	30,000
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	274,215

Additions to plots previously established:

Albemarle West.....	1,500
Albemarle East.....	5,000
Angus.....	45,000
Bowmanville (Boy's School).....	2,000
Cramahe.....	7,500
Coldwater.....	15,000
Lindsay.....	11,500
Middleton.....	1,000
Manvers.....	44,000
McEwan's Woods.....	1,600
Preston.....	7,500
Uxbridge.....	4,000
Windham.....	23,700
Warkworth.....	300
Woodbridge.....	2,800
Vespra.....	15,000
Chapelau Woodlot.....	2,000
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	189,400

PRIVATE PLANTING

In the spring of 1929, 4,750 people secured trees from the Ontario Forestry Branch, totalling in all, 6,549,642 trees.

SEED COLLECTING

The following seed was collected during the year.

CONIFERS

Species:	Quantity in Bushels
Red Pine.....	13,033 1/2
White Pine.....	595 5/8
Scotch Pine.....	68
Jack Pine.....	2,267 1/2
Austrian Pine.....	23
White Spruce.....	230 1/8
Norway Spruce.....	884 3/8
Balsam.....	5 5/8
Hemlock.....	30 3/8
Tamarack.....	1/8
Red Cedar.....	5 3/8
White Cedar.....	139 4/8
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	17,283 1/8

HARDWOODS

Red Oak.....	158 1/8
White Ash.....	79 5/8
Hard Maple.....	37 3/8
Soft Maple.....	60
Elm.....	8
Norway Maple.....	1 6/8
Yellow Birch.....	9 4/8
Basswood.....	2/8
Black Locust.....	11 1/8
Black Cherry.....	12
Hickory.....	19 3/8
Bitternut Hickory.....	1 3/8
Walnuts.....	1,659 2/8
Butternuts.....	104 7/8
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	2,162 5/8
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Total.....	19,445 3/4

SUMMARY OF TREES PLANTED PERMANENTLY

PLACE	Conifers	Hardwoods	Cuttings	Totals
Private Planting:				
Reforestation.....	4,331,744	893,507	430,429	.....
Windbreaks.....	893,962	.....	.....	6,549,642
Demonstration Plots.....	388,800	59,200	16,215	464,215
Hendrie.....	78,500	2,500	.....	81,000
Vivian.....	265,000	40,000	30,000	335,000
Northumberland.....	50,000	.....	.....	50,000
Uxbridge.....	365,500	53,500	.....	419,000
Durham.....	275,000	.....	.....	275,000
Larose.....	230,000	.....	.....	230,000
Victoria.....	349,000	2,000	.....	351,000
Orr Lake.....	361,748	.....	.....	361,748
Private Forests.....	150,000	.....	.....	150,000
Nairn.....	210,000	.....	.....	210,000
Kirkwood.....	970,000	.....	.....	970,000
Little Blackstone.....	10,500	.....	.....	10,500
Laurier.....	184,000	.....	.....	184,000
Diver.....	335,000	.....	.....	335,000
Kiosk.....	237,000	.....	.....	237,000
Bridgeland.....	75,000	.....	.....	75,000
St. Williams.....	114,860	49,200	328,000	492,060
Midhurst.....	302,000	.....	.....	302,000
Sand Banks.....	37,665	.....	78,450	116,115
Camp Borden.....	356,500	15,250	.....	371,750
North Bay.....	190,000	.....	.....	190,000
Totals.....	10,761,779	1,115,157	883,094	12,760,030

SUMMARY OF NURSERY STOCK FOR PLANTING, 1930

NURSERY	Conifers	Hardwoods	Totals
St. Williams.....	4,955,000	1,045,000	6,000,000
Orono.....	3,145,000	453,900	3,598,900
Midhurst.....	1,989,790	269,580	2,259,370
Sand Banks.....	245,723	3,661	249,384
Totals.....	10,335,513	1,772,141	12,107,654

V.—FOREST SURVEYS

Under the Provincial Forests Act passed during 1929, eight areas within the forest area of the province are set aside as provincial forests. These include the five original forest reserves: Eastern, Timagami, Mississagi, Nipigon and Sibley, and three newly created forests, the Kawartha, Georgian Bay and Wanapitei.

Prior to the act forest surveys had already been conducted covering the Mississagi, Nipigon, Kawartha and parts of the Eastern and Timagami Provincial Forests. These earlier surveys consisted largely of a classification of the forest into types and age classes and a timber estimate.

During 1929 the work was continued by the examination of the forest conditions in the Wanapitei Provincial Forest and in the southeasterly portion

of the Timagami Provincial Forest but with the more definite objective of relating the forest conditions and timber estimates to a preliminary forest working plan for the areas.

In addition, the 1929 survey programme included a study of the ownership conditions in the Georgian Bay Provincial Forest.

Timagami Provincial Forest Survey

The area under examination in this survey comprises about 400,000 acres and includes the townships adjacent to Timagami lake, namely, Aston (eastern third) Banting, Belfast, Best, Briggs, Brigstocke, Chambers, Clement, Cole (eastern half) Law (western half) Le Roche (western half) Medina, Olive (western half) Scholes, Strathcona, Torrington, Vogt and Yates.

Three parties totalling twenty-five men and under the direction of a forester made up the field force. Work commenced May 28, and was discontinued September 20.

This section of the Timagami Provincial Forest may be roughly divided by two distinct forest age classes. The southern half is forested by mature stands with white and red pine dominating the mixtures. The northern half is an immature stand reproduced following fire some sixty years previous and contains a medley of associations in the mixtures of poplar, birch, white and red pine, jack pine, spruce and balsam.

Owing to the large volume of timber in the southern half more samples were necessary to provide an estimate. Strip lines were run at one-quarter mile intervals and the trees tallied on a width of thirty-three feet along the strip. In the immature stands strips were run one-half mile apart and complete composition and age plots 100 feet long and thirty-three feet wide were taken at five chain intervals.

In this survey a departure has been made from earlier surveys in the nomenclature of forest types. Previously symbols were used on the maps to designate the forest types. These proved unsatisfactory for descriptive purposes and has given way to type numbers, each number referring to a summary sheet containing the actual composition of the samples taken.

For the Timagami Provincial Forest Survey township plans are in the course of preparation on a scale of one inch equals one-half mile.

Wanapitei Provincial Forest Survey

The Wanapitei Provincial Forest is located some thirty miles north from the city of Sudbury, and includes the townships of Aylmer, Norman, Parkin and a portion of Rathbun. It covers approximately 70,000 acres and constitutes the area covered by the fourth survey party in the field during 1929.

The objective of this survey was a complete division of the tract into forest types on the basis of the present composition and further into actual age classes. Strip lines were run at one-quarter mile intervals and checked from control lines established every two miles.

The whole tract may be considered as immature, only some 1,000 acres being classified as mature. The present immature stands occupy areas reproduced following burns fifty-five years ago and since.

The compilation of data, from both this survey and that conducted in the Timagami Provincial Forest follows much the same method. Forest types are numbered on the plans and refer to summary sheets giving a complete analysis of the species of tree entering the composition together with actual ages.

Township plans and a written report are at present being prepared.

Georgian Bay Provincial Forest

Preliminary to future investigations concerning the forest conditions on the Georgian Bay Provincial forest it was deemed advisable to have complete information on the status of land ownership in the area and the condition of farming.

One man was attached to the Forestry Branch district office, Parry Sound, and was employed during June, July and August.

The area covered amounted to slightly over 433,000 acres and comprises the townships of Blair, Brown, Burpee, Burton, Harrison, Mowat, Shawanaga and Wallbridge.

The results of this survey shows 14,509 acres held as patented, leased and under license of occupation. There are 9,071 acres patented, 384 acres leased and 5,054 acres under license of occupation. In addition there are known to be thirty-nine squatters on the area for which no area figures can be given.

Attention was paid to the extent to which the land was being cultivated, and in the area of 14,509 acres, 685 acres are reported as cleared.

VI.—FOREST INSECT CONTROL

(1) *Hemlock Looper (Ellopija fiscellaria)*.

The operations commenced in 1928 in connection with the control of an infestation by this insect were continued. These operations were centered around Foote's Bay in the Muskoka District and around Parry Sound.

By the use of a seaplane calcium arsenate was dusted over the infested area while the insect was in the larvae or caterpillar stage. Tests made of the results indicated a mortality of from seventy-five to ninety per cent. During the dusting period the weather was not all that could be desired, several dustings having to be repeated because of rain, but it is believed that the outbreak has been sufficiently checked to enable parasites to practically exterminate the Looper.

The area actually dusted was 1,040 acres on which 16.5 tons of dust were distributed.

(2) *Spruce Budworm (cacoecia fumiferana)*

Experiments in connection with the control of the Spruce Budworm were again carried on in the area west of Sudbury. This work is on a co-operative basis with the Entomological Branch of the Federal Department of Agriculture which supplies the technical supervision and the Department of National Defence which supplies the plane for dusting purposes.

(3) *Larch Sawfly (Lygaeonematus erichsoni, Hart.)*

A considerable outbreak of this insect has been noted in some districts. The Dominion Entomological Branch is introducing parasites as rapidly as possible to the various affected areas.

(4) *Jack Pine Sawfly (genus neodiprion)*

What appears likely to be a serious attack on the jack pine along the Canadian Pacific Railway west of Sudbury was the subject of a preliminary study during the season. The exact species of the insect has not yet been determined.

Ontario Department of Agriculture

REPORT

OF THE

Ontario Veterinary College

1929

PRINTED BY ORDER OF
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SESSIONAL PAPER No. 8, 1930



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1930



Report of the Ontario Veterinary College

TO THE HONOURABLE JOHN S. MARTIN,
Minister of Agriculture.

SIR,—

I have the honour to present herewith the following report of the Ontario Veterinary College for the year extending from November 1st, 1928, to October 31st, 1929.

COMMENCEMENT EXERCISES

The Annual Commencement Exercises and Presentation of Prizes took place on November 7th, 1928, in the Assembly Hall at the College. Owing to your unavoidable absence I presided as chairman, and the Hon. Manning Doherty addressed the gathering and presented the prizes to the successful candidates. In the course of his address Mr. Doherty alluded to the achievements of the College in the past and pointed out that veterinary science was now finding its true place in the public estimation. Proceeding, he traced the history of the veterinary profession from its early beginnings to the present day and declared that the College and the science it represented had a higher standing than ever before. It was now being more widely realized throughout the world that the health of animals and the resultant welfare of animal industry were becoming more dependent on the services of veterinarians. He recommended students to have pride in their Alma Mater and profession, believing that the pride had its foundation in true accomplishment. In concluding his address, Mr. Doherty declared that among the chief ambitions of the moment should be an earnest desire to make a success of life. It is a laudable ambition, and yet standards may be uncertain and sometimes unworthy as to what success really is. However, if after a life's work a man can say that he is glad he had chosen his profession, can say that he is happy and proud of his career, can say that he has done his duty nobly, then his life has been a success. He congratulated the prize winners, impressing them with the fact that the value was not wholly in the award but in the struggle to obtain it.

STUDENT ENROLMENT

For the session ending April 30th, 1929, a total of 80 students were in attendance, of which 24 were in the first-year class, 19 in the second-year class, 18 in the third-year class, and 19 in the senior class. Of the senior class 18 candidates were successful in passing the final examinations and received the degree of Bachelor of Veterinary Science (B.V.Sc.) conferred by the University of Toronto at a special convocation held on April 30th, 1929.

During the present session, which commenced October 1st, 1929, a total of 80 students are registered, of which 20 are in the first-year class, 25 are in the second-year class, 19 are in the third-year class, and 16 are in the senior class.

It is again pleasing to report that students are in attendance from each of the provinces of Canada, as well as from other parts of the British Empire, and from the United States. It is also worthy of mention that all of our recent graduates have been successful in passing the civil service examinations for appointment as veterinary inspectors both in Canada and the United States.

THE TEACHING STAFF

A slight rearrangement of the staff had to be made owing to the temporary transfer of Dr. R. Gwatkin to the laboratory staff of the Ontario Research Foundation. As a result, an adjustment was made whereby Dr. F. W. Schofield assumed charge of the Departments of Bacteriology and Pathology. Arrangements were also made whereby Dr. A. A. Kingscote was added to the staff as a Laboratory Instructor and Lecturer. The personnel of the staff and their respective departments are as follows:

C. D. McGilvray, M.D.V., D.V.Sc., Principal, Contagious Diseases, Sanitary Service.
 J. N. Pringle, M.R.C.V.S., B.V.Sc., Sporadic Diseases, Dentistry.
 R. A. McIntosh, M.D.V., Diseases of Cattle, Obstetrics, Pharmacy, Therapeutics.
 W. J. R. Fowler, V.S., B.V.Sc., Surgery, Lameness, Materia Medica.
 H. D. Nelson, B.V.Sc., D.V.Sc., Anatomy.
 R. Gwatkin, B.V.Sc., D.V.Sc., Bacteriology, Milk Hygiene.
 H. E. Batt, V.S., B.V.Sc., Zoology, Histology, Meat Hygiene.
 F. W. Schofield, B.V.Sc., D.V.Sc., Pathology, Bacteriology.
 A. A. Kingscote, V.S., B.V.Sc., Parasitology, Pathology.
 L. Stevenson, B.V.Sc., M.S., Physiology.
 J. S. Glover, V.S., B.V.Sc., Serologist, Poultry Diseases.
 F. J. Cote, V.S., B.V.Sc., Canine and Feline Diseases.
 Angus Dunbar, Jurisprudence.

THE COURSE OF STUDY AND INSTRUCTION

In general, the course is becoming more diversified and additional attention is being given to pure science, as well as clinical instruction and routine laboratory exercises. During the month of July a short course was provided for general practitioners. A total of sixty practising veterinarians attended the course from different parts of the Province. The course of instruction comprised poultry diseases, methods of laboratory diagnosis, including the agglutination test for pullorum disease, cattle diseases, including infectious abortion and its diagnosis by the agglutination test, methods of prevention and control, tuberculosis and tuberculin testing, sterility, its diagnosis and treatment, blackleg, its nature, cause and prevention; hemorrhagic septiceimia, its nature, cause and prevention; udder and teat troubles in cows, white scours and pneumonia of calves, congenital diseases of the young animal, dairy hygiene and stable inspection, demonstrations of parasitic diseases in sheep, swine, dogs and foxes, with their treatment and control. A detailed outline of the undergraduate course of study and instruction is contained in the College Calendar which is distributed to those interested.

RESEARCH AND INVESTIGATIONAL WORK

During the year many requests were received from time to time to investigate diseases of an unusual nature. As a result, members of the College staff, in addition to their regular class work, had to undertake considerable special investigational and research work. Some further studies have been carried out in relation to anemia of young pigs, arthritis of pigs, cirrhosis of the liver in horses, infectious abortion of cattle, osteomalacia of cattle, parasitic diseases. A number of special articles relating to some of the studies undertaken are

embodied in the general report. During the month of October, Dr. H. B. Speakman, Director of the Ontario Research Foundation, visited the College and gave an address to the students and members of the Ontario Veterinary Association. At the same meeting I also presented an abstract of articles appearing in current journals. Many requests have been made to have these addresses recorded more permanently and they are therefore being included in this report.

SYNOPSIS OF ADDRESS GIVEN BY DR. H. B. SPEAKMAN

Dr. Speakman stated that he had two main purposes to impress on the members of the veterinary profession, namely, the importance of their calling, and to give an outline of the work in connection with the Ontario Research Foundation. At the outset the Foundation, he believed, would help to fill a long-felt want. While of quite recent birth it was proving to be a "lusty youngster." It was created by the Hon. G. H. Ferguson, Premier of Ontario, who had about eighteen months ago called a meeting of business men and others and outlined plans for the formation of the Foundation and its endowment. He proposed that if these men would contribute the sum of one million dollars towards the establishment of the Foundation, the Government would equal that contribution. Eventually, it was formed with at least five definite objects. To develop, support and carry on research work to benefit the advancement of industry; to develop natural resources; to undertake research work in connection with the diseases of animals, and diseases of plants; to carry on investigations to improve agricultural pursuits and to better life on the farm; and to do anything which meets with the general approval of the Lieutenant-Governor in Council for the Province. It may not be possible for a time to deal with all of these problems on as large a scale as might be desired if for no other reason than the enormous expense entailed therein. However, they would receive the best attention of the Foundation, through its officers and staff, and as large a measure of support as is possible.

In this regard, it should be realized that investigating agricultural problems and diseases of animals was vastly different than looking into questions dealing with industry. Because, in the industries under examination they are able to bring masses of capital directly to the aid of the Foundation's purposes. On the other hand, funds for agricultural investigations and scientific animal diseases research are not available from those directly concerned and have to be supplied largely by Government institutions of public character. In view of this, one of the first actions of the Foundation was the formation of an agricultural committee, composed of prominent breeders of live stock and technical men, to make a survey of animal disease problems. On this committee the veterinary profession, as well as the medical profession, is largely represented. The veterinary profession should grasp the opportunity they hold, not only in the Province of Ontario but in the Dominion as a whole, to render a large measure of scientific service.

Speaking of the position that the veterinarians occupy in relation to animal health, he would urge them to think of the material under their control. Agriculture still remains the greatest source of economic wealth in Canada. Live stock and allied industries play a large part in this. Therefore it was readily seen that veterinarians are guardians of one of the greatest sources of national prosperity. Is it not worth while pausing and trying to get some idea and importance of the task awaiting us? Moreover, in relation to public health, on the shoulders of veterinarians is laid the task of determining what kind of animal products enter

the home or go abroad into export trade. To this extent at least veterinarians are also custodians of the health of the people, in providing wholesome disease-free foods of animal origin. The undergraduates should also get a glimpse of the vast responsibility of the profession they were qualifying for and with the responsibility, the opportunity which presents itself.

He expressed the hope that there would be no division between those doing research work and the ones doing academic work, training the student. Unless men are well trained and properly educated, all the research work done would lose considerable of its value. Conditions have changed, and men graduating from college must now have a wider range of knowledge than was previously the case. He considered the Ontario Veterinary College to be maintaining a good standard of training and qualification, and enjoying an enviable reputation as one of the leading institutions of its kind.

SYNOPSIS OF ADDRESS GIVEN BY C. D. MCGILVRAY

There is a great deal written and said about the different sciences these days in relation to research and investigation. This is only natural, as every year sees a further accumulation of facts and unless we keep continually alive to modern scientific progress, together with new theories being advanced, we may find ourselves becoming more obsolete each year. The process of scientific investigation has been compared to filling out a picture puzzle. For a time we may proceed confidently on what appears to be a definite setting only to find after a while that the picture is becoming quite different from our original conception. This does not mean that the entire puzzle has to be given up but rather that we should rearrange the pieces in order that we may finally get more pieces to fit into the right places and as a result draw closer to a solution of the whole puzzle. The point to be kept in mind is that true science and research keeps progressing to complete the picture and is reflected from year to year in notable changes, steady advancement, and actual achievements.

In the advancement of science education greatly helps, both by arousing our curiosity for more information, as well as by acquiring facts, and finally by making available to us the new developments in science and research of which we might otherwise remain ignorant. The background one receives at college should be fundamentally sound so as to be able to properly gather and make use of new developments in science. At the present time there is an increasing desire to become identified with research and investigational work. Many seem to wish to devote their lives to scientific research and to follow knowledge beyond the present realms of human thought. This is highly laudable, especially when for the common good and not actuated by vanity and personal gain.

Strictly speaking, the true purpose of research is to reduce complex ideas into simple formulas available for general use. In relation to disease there is an age-long groping for a definite cure formula that is pathetic. During recent years preventive medicine is being stressed and people are now seeking and expecting a new set of formulas that will guarantee against sickness. This tendency is, however, even traceable back to very early times when mystic rites and charms were used to drive off the demons that engulfed the sick. Next, we had the seasonal use of particular potions of herbs and drugs to ward off sickness, and this prevails even to the present time. This belief was accentuated when Hippocrates enunciated the formula of the humoral theory of disease characterized even to this day by the use of spring tonics to thin the blood, kidney and blood purifiers of different kinds, liver pills to clear the system of bile, and chiropractic adjustments of the body so that the vital juices may flow more freely.

Proceeding further, the mechanistic idea of life began to gain ground when Virchow demonstrated that the unit of living things is the cell and that variations in the size, shape and arrangement of cells determine the nature of the different organs and tissues which make up the body. This discovery laid the foundation for the study of anatomy, histology, physiology and pathology. This undoubtedly put medical science on a more rational basis. As a result there developed a new school of thought whereby we now better understand the fundamental principles of the structure of the body and that life and health is to some extent but the expressions of the favourable natural reactions of the body cells and that disease represents the unfavourable reactions of the body structures brought about by deleterious stimulation of the body cells. This has always created hope that the science of preventive medicine might be reduced to a few simple basic formulas. Unfortunately, however, such has only been realized in some respects. Then came Pasteur's discovery of the germ theory of disease, giving rise to the new science of bacteriology.

Following this, two opposing schools of thought held sway for a long time, and the champions of cellular pathology resisted the central idea of bacterial disease. Arising from Pasteur's discovery, the specific cause of many diseases have been definitely established to be of microbial origin. The advancement of bacteriology paved the way for vaccinal therapy as well as antitoxin treatments. The biologic laws that regulated these treatments although complex were made to appear simple and reasonable and impulsively people were led to a renewed hope that before long a vaccine or an antitoxin would be available either as a preventive or as a specific cure for every disease. The desires of the people had again been carried too far and they have to be disillusioned. In some respects unlearning the public is even more difficult than learning them in order that they may readjust themselves. More recently, hope has again been raised by the doctrine of endocrinology and the science of biochemistry. How fascinating it has been to revive the weird powers of gland secretions, the functions of the ductless glands, and the chemical reactions within the body. Here again, if only we could classify and determine the specific action of each endocrine and learn to control it the maintenance of health might be reduced to a few simple formulas.

Alas! Great is the accumulation of wisdom but great also is the wreckage of beliefs and promises. The great difficulty at times is to find out the exact truth and to reject the false. This is the purpose of true research and investigation of disease problems. There is still much truth in the old saying that "he who delves the deepest may be the least sure of his ground." In fact, we are beginning to realize more than ever that as yet there is no formula or even group of formulas that will ensure health or prevent disease in general. The known facts are too vast and too complicated and the missing links are too many, and life as yet is still to some extent an art and not solely a science. The fundamental principles of health and disease must still be studied in order that all the different principles of prevention and treatment can be brought into play. Unfortunately, it is not sufficiently realized in many cases that animal diseases research work can only be carried to successful completion under the proper auspices, involving time and suitable facilities. Heretofore we have been too prone to cast the burden of animal disease prevention and treatment on the individual instead of considering it as a national undertaking of magnitude based on exhaustive researches suitably endowed. After all, the important item in research work is not massive buildings but knowledge and stimulation that comes from appreciation and the moral support of an understanding public.

EXTENSION SERVICE

This branch of usefulness is being availed of to an increasing extent, both by veterinarians and live stock owners. It would appear that those concerned with the health of animals are seeking the best possible means for the diagnosis and treatment of disease based on laboratory findings. As a result a wider use is being made of laboratory facilities for both histo-pathology and bacteriological examinations. In all cases the specimen received is carefully examined and a detailed report of the findings is sent to the one directly concerned. A steadily increasing number of agglutination tests (blood tests) are being made for the diagnosis of pullorum disease in poultry, and for infectious abortion in cattle, as well as the microscopical and bacteriological examination of diseased specimens of all kinds, including parasitic specimens.

During the year a steady stream of enquiries have been received relating to infectious abortion of cattle, and there appears to be developing a greater desire for more definite legislative measures of control. These enquiries have entailed a vast amount of personal correspondence. Over one thousand letters have been received and answered relating to abortion and sterility in cattle. Further encouragement is being given to make use of the available facilities for the blood testing of cattle for this disease and for the control of the disease in individual herds.

As an indication of the effort that is being made to render the best possible service, the number of specimens received and the nature of the diseases dealt with are recorded under their respective departmental headings. Several special articles relating to interesting subjects and researches are included as part of the general report.

All of which is respectfully submitted.

C. D. MCGILVRAY,
Principal.

GUELPH, ONTARIO,
October 31st, 1929.

CLINICAL DEPARTMENT

The work of this department embraces the applied branches of veterinary medicine and surgery. All animals brought to the clinics are carefully examined after which treatment is prescribed and operations performed as may be required. The cases are carefully selected and made use of to impart instruction to the students by means of lectures and special demonstrations. A list of the clinical cases relating to the different classes of animals are recorded under their respective headings, and a number of interesting conditions are embodied as special articles in the report.

HORSE CLINICS

Number of Animals	Nature of Case	Remarks
20	Dental Cases	Dental treatment.
1	Dental Tumor	Surgical removal.
2	Sinusitis	" treatment.
2	Empyema of the Sinus	" "
1	Necrosis of Nasal Bones	" "
2	Diseased 4th Molar	" "
1	Dentigerous Cyst	" "
7	Fistulous Withers	Radical operation.
3	Serous Effusion (Withers)	Surgical treatment.
4	Poll Evil	Radical operation.
1	Sternal Injury (Serous Sac)	Surgical treatment.
7	Sore-neck	Medicinal "
5	Spavin	Surgical treatment and counter irritation.
2	Tarsitis	Analgesic "
1	Bog Spavin and Thoroughpin	Counter irritation.
2	Carpitis	" "
1	Distension of Carpal Sheath	" "
5	Sidebones	" "
4	Ringbones	" "
3	Stifle Lameness	" "
1	Gonitis	Demonstration case.
2	Curb Lameness	Actual cautery.
1	Hip Lameness	" "
2	Capped Hock	Surgical treatment.
1	Ankylosis of the Fetlock	Demonstration case.
2	Overgrown Hoofs	Paring and balancing.
1	Quittor	Operative treatment.
1	Bruise in the Sole of Foot	Surgical "
1	Infection of the Foot (by sliver)	Antiseptic "
1	Canker of the Foot	Surgical "
1	Chronic Lymphangitis	Medicinal "
3	Laminitis	" "
3	Shoulder Tumors	Surgical excision.
4	Laryngeal Hemiplegia	" operation.
5	Malignant Tumor Cases	
2	" " of Sheath and Penis	
3	" " of Eye	Two surgically removed.
3	Granulomatous Growths	" "
1	Paraphymosis	Surgical treatment.
1	Deformed Penis	
3	Injuries	Antiseptic and surgical treatment.
4	Colic	Medicinal treatment.
1	Volvulus of Colon	
2	Gastric Tympany	Medicinal treatment.
2	Impaction of the Colon	" "
1	Periodical Colic	" "
3	Pulmonary Emphysema	" "
3	Influenza	" "
15	Infectious Diarrhea	" "
1	Superpurgation and Laminitis	" "

HORSE CLINICS—Continued

Number of Animals	Nature of Case	Remarks
2	Abortion	
2	Endometritis	Medicinal treatment.
2	Retained Afterbirth	Manual removal.
1	Dystokia	“ handling.
1	Pneumonia	Medicinal treatment.
2	Umbilical Hernia	Surgical “
4	Castration	“ operation.
2	Goitre	Medicinal treatment.
3	Navel Infection	Antiseptic “
1	Navel Ill	Medicinal and biological treatment.
1	Cryptorchid	Surgical operation.
1	Impotency	Hygienic measures.
1	Pericarditis	Medicinal treatment.
3	Tetanus	Antitoxin “
1	Wry Neck	Demonstration.
10	Wounds	Antiseptic treatment.
	Demonstrations of Restraint	Work done by students.
	Examinations for Soundness	“ “ “
	Administration of Medicines	“ “ “
	Demonstrations of Bandaging	“ “ “
	Uses of Local Anaesthesia	“ “ “
	Point and Line Firing	“ “ “
	Inguinal Exploration	“ “ “
	Demonstrations of Surgical Landmarks	“ “ “
	“ Tenotomies	“ “ “
	“ Neurectomies	“ “ “
	Post-mortem Technique	“ “ “

CATTLE CLINICS

7	Retained Placenta	Removal.
2	Ruptured Vagina	Antiseptic irrigation.
6	Purulent Endometritis	“ “
2	Septic Metritis	“ “
3	Protrusion of the Vagina	Replacement and Medical Treatment.
1	“ “ and Rectum	“ “ “ “
3	Dystokia	Manual handling.
1	Torsion of the Uterus	“ “
6	Examination for Pregnancy	By manipulation.
60	Sterility	Manual treatment.
6	Abortion	After care.
24	Abortion Test with Abortin	
1	Impotency in a Bull	Examination.
2	Tumor of the Penis	Surgical removal.
1	Abnormal Testicles (High Flanker)	Castration.
3	Supernumerary Teats	Surgical operation.
6	Mammitis	Medicinal treatment.
6	Teat Obstruction	Surgical “
2	Teat Fistula	“ “
4	Milk Fever	Udder inflation.
2	Septic Arthritis (calves)	
5	Calf Pneumonia	Medicinal treatment.
12	Calf Scours	“ “
1	Umbilical Hernia	Surgical operation.
1	Congenital Occlusion of Bile Duct	
1	Occlusion of the Parotid Ducts	
1	Umbilical Abscess	Surgical treatment.
4	Abscess	“ “
2	Hygroma	“ “
3	Chronic Diarrhea	Medicinal “
1	Carcinoma of Eyelid	Surgical removal.

CATTLE CLINICS—Continued

Number of Animals	Nature of Case	Remarks
2	Eye Tumor.....	
2	Traumatic Pericarditis.....	Operative treatment.
1	Ventral Hernia.....	
1	Cerebro-spinal Meningitis.....	Medicinal treatment.
1	Dental Derangement.....	
1	Tarsitis.....	Counter irritation.
1	Hip Lameness.....	“ “
1	Eczema.....	Medicinal treatment.
1	Pyonephritis and Cystitis.....	“ “
2	Abomastitis.....	“ “
3	Indigestion and Tympany.....	“ “
2	Dyspepsia.....	“ “
1	Pharyngitis.....	“ “
3	Atony of Rumen.....	“ “
1	Blackleg.....	
87	Blackleg Inoculations.....	
2 Herd	Hemorrhagic Septicemia Inoculations.....	
1 “	Ringworm.....	Application of Parasiticides.
1 “	Deficiency Disease.....	Advice as to feeding and care.
1 “	Malignant Catarrh.....	Medicinal treatment.
3 “	Abortion.....	Advice as to handling.
	Demonstrations of Restraint.....	Work done by students.
	“ Administration of Medicine.....	“ “ “
	“ Caudal Intradermal Inoculation.....	“ “ “
	“ Udder Irrigation.....	“ “ “
	“ Epidural Anaesthesia.....	“ “ “
	“ Sterility Examinations.....	“ “ “
	“ Trimming Feet.....	“ “ “
	“ Bleeding for Agglutination Test.....	“ “ “
	Post-mortem Examination.....	Malignant Catarrh.
	“ “.....	Calf Pneumonia.
	“ “.....	Occluded Bile Duct.
	“ “.....	Septic Arthritis.
	“ “.....	Traumatic Pericarditis.
	“ “.....	Chronic Diarrhea.
	“ “.....	Gravid and Non-gravid Uteri.
	“ “.....	Blackleg.

SHEEP CLINICS

3	Dystokia.....	Manual handling.
2	Prolapse of Vagina.....	Surgical treatment.
1	Hemorrhage after docking.....	
75	Parasitism.....	Preventive dosing.
5 Flocks	Hemorrhagic Septicemia.....	Vaccination inoculations.
1 Flock	Rape Poisoning.....	Regulation of diet.
1 “	Rachitis.....	“ “
3 “	Tapeworm Infestation.....	Medicinal treatment.
	Post-mortem Examination.....	Pneumonia (5 cases).
	“ “.....	“ and Taeniasis.
	“ “.....	Nodular Disease and Taeniasis.
	“ “.....	Parasitism (4 varieties).
	“ “.....	Hemorrhagic Septicemia (5 cases).
	“ “.....	Cirrhosis of the liver.
	“ “.....	Rape poisoning.
	“ “.....	Septicemia.
	Demonstration of Administration of Medicines.....	

SWINE CLINICS

Number of Animals	Nature of Case	Remarks
5	Scrotal Hernia	Operative treatment.
1	Inguinal Hernia	“ “
2	Hermaphrodisism	“ “
3	Cryptorchid	“ “
1	Hydrocele	“ “
1	Dystokia	Caesarian section.
2	Constipation	Medicinal treatment.
1	Infected Foot	Surgical “
1	Pseudoleukemia	
1	Chronic Pneumonia	Medicinal treatment.
70	Enteritis	Preventive inoculation.
	Post-mortem Examination	Parasitic Pneumonia.
	“ “	Roundworm infestation.
	“ “	Anemia and Enteritis.
	“ “	Nodular Lymphadenitis.
	“ “	General Sepsis.
	“ “	Enteritis with Adhesions.
	“ “	Parasites and Pneumonia.
	Demonstration of the Administration of Medicines	

SMALL ANIMAL CLINICS—DOGS

62	Ovariectomy	Surgical operation.
5	Caudal Amputation	“ “
4	Mammary Tumor	“ “
2	Castration	“ “
4	Tumefaction of Membrana Nictitans	“ “
1	Ablation of the Eye	“ “
6	Corneal Opacities and Ulcers	Antiseptic treatment.
1	Eye Infection	“ “
2	Foreign body in the Eye	Surgical removal.
1	Laceration of Lower Eyelid	“ treatment.
2	Injury to the Toe	“ “
4	Removal of Dew Claw	“ “
2	Injury of Foot Pad	Antiseptic treatment.
2	Infected Toenail	“ “
5	Overgrown Toenails	Trimming.
1	Fractured Metacarpus	Surgical application.
2	“ Femur	“ “
2	Abscess Parotid	Incision and antiseptic.
1	“ Cranial	“ “ “
2	“ Pharyngeal	“ “ “
1	“ Mammary	“ “ “
2	Ranula	“ “ “
5	Injuries	Antiseptic treatment.
3	Hip Lameness	Counter irritation.
6	Roundworm Infestation	Vermicides and vermifuges.
7	Tapeworm “	“ “ “
4	Follicular Mange	Parasiticides applied.
3	Sarcoptic “	“ “
2	Pediculosis	“ “
4	Gastritis	Medicinal treatment.
2	Enteritis	“ “
2	Stomatitis	“ “
2	Ulcerated Teeth	Antiseptic extraction.
2	Diarrhea	Medicinal treatment.
2	Deficiency Disease	Regulation of diet.
1	Running Fits and Goitre	Medicinal treatment.
1	Cirrhosis of the Liver	
3	Eczema (dry)	Medicinal treatment.
3	“ (moist)	“ “

SMALL ANIMAL CLINICS—*Continued*

Number of Animals	Nature of Case	Remarks
2	Cutaneous Infection	Biological treatment autogenous.
4	Distemper	Medicinal “
2	Paralysis	“
3	Preventive Inoculation against Distemper	
1	Rheumatism	Medicinal treatment.
2	Castration	Surgical operation.
2	Dystokia	Manual handling.
1	Nymphomania	
	Demonstration of Breed Characteristics and Conformation	
5	Humanely Destroyed	

CATS

12	Ovariectomy	Surgical operation.
8	Castration	“ “
2	Dystokia	{ 1 Gastrohysterotomy.
		{ 1 Manual handling.
1	Umbilical Hernia	Surgical operation.
2	Conjunctivitis	Medicinal application.
3	Poisoning	“ treatment.
4	Otodectic Mange	“ application.
3	Sarcoptic “	“ “
1	Obesity and Eczema	Regulation of diet.
1	Gastritis	Medicinal treatment.
6	Humanely Destroyed	

MISCELLANEOUS

1	Fox—Fracture of Radius	Amputation of leg.
1	“ Fracture of Tibia	“ “
1	“ Meningitis	Post-mortem examination.
1	“ Gastro-enteritis	“ “
1	Ferret—Pharyngeal Abscess	Incision and antiseptics.
2	Roosters—Oedema of the Wattles	Surgical removal.
1	Hen—Impaction of the Crop	“ treatment.
1	Parrot—Tumor (Epithelioma)	“ removal.

Note.—In reference to the sheep and swine clinics in practically all instances where post-mortem examinations were held, they were cases representative of conditions affecting a flock of sheep or a herd of swine as a whole and in which considerable losses had been experienced.

STERILITY IN COWS

By R. A. INTOSH, M.D.V., B.V.Sc.

The increasing prevalence of sterility in cows is a matter of considerable concern both to veterinarians and livestock men. There are a number of factors which lead to its occurrence. Chief amongst these is abortion disease. Abortion disease is essentially a condition involving the uterus and the placental structures, and in many instances chronic affections of the genital tract follow it. The tendency of dairymen to feed their cows heavily for extreme milk production, to keep them closely housed, and not allowing them any exercise lends itself to the occurrence of disease for it robs the animals of their vigour and vitality thus lessening their resistance to infections. The specific causes for sterility are many and varied in their character and in some instances several lesions are found, any one of which may be sufficient to prevent reproduction. The following table of sterility clinics held during the past year indicates the diagnosis of the cases and the nature of the conditions responsible for their failure to reproduce. In a number of instances the animals handled had more than one condition affecting them, so in the table the most important lesion in each case is primarily referred to and the other conditions designated as complications.

Number and Character of Cases	Complications Observed
20 Endometritis.....	12 Atonic uteri, 5 Cystic ovaries, 2 Cervicitis, 20 Purulent discharge.
12 Cystic Ovary.....	10 " " 7 Pelvic deformity, 7 Purulent discharge.
6 Cervicitis.....	2 " " 1 R. Ovarian adhesions, 5 Purulent discharge.
5 Absence of Estrum...	3 Persistent Corpora Lutei, 2 Pyometra.
3 Salpingitis.....	3 Adhesions, 1 Cystic ovary, 1 Purulent discharge.
4 Pyometra.....	2 Adhesions, 1 Absence of estrum, 2 Purulent discharge.
10 Functional Sterility..	5 Virgin heifers, 6 Evidence of nutritional deficiency.
1 Congenital Deformity	Persistent hymen, deformed cervix.
1 Vaginitis.....	Vaginal adhesions, purulent discharge.

PHYSIOLOGY OF THE GENITAL ORGANS

The reproductive organs of the cow consist of the ovaries, oviducts, uterus, cervix, vagina and vulva. The ovaries are the essential reproductive glands of the female which elaborate the ovum or egg. In addition they give off an endocrine secretion which influences the development of feminine characteristics. In ruminants they are situated on the anterior border of the broad ligament closely related to the fimbriated extremity of the oviduct. They are rather loosely attached and by rectal manipulation can be readily palpated on the floor of the pelvis just at the brim of the pubes, one to the right side and the other to the left. At sexual maturity they become functionally active. Ovisacs mature and under the influence of this phenomena the entire genital tract becomes congested and the occurrence of estrum is manifested. At or about this time the mature ovisac ruptures permitting the escape of the ovum and its follicular fluid into the fimbriated extremity of the tube from whence it is conducted to the uterus. If copulation has been permitted the spermatozoa may fertilize the ovum and the development of a new being commences within the uterus. Following the rupture of an ovisac the cavity it occupied is quickly filled with a blood clot, the lutein cells commence to develop replacing the clot and the space, forming a

structure known as the corpus luteum or yellow body. This structure behaves differently depending on whether the cow conceives or not. If the animal has been bred and conceives the corpus luteum remains and persists throughout the pregnancy period. On the other hand if she does not conceive the yellow body is reabsorbed within the period of the estral cycle (21 days). Its disappearance on the ovary is coincident with the maturation of an ovisac a few days prior to the occurrence of estrum. Apparently while functionally active it inhibits the phenomena of heat.

The oviducts are two convoluted tubules lying in the folds of the broad ligament at its free extremity. They are continuous with the apices of the uterine cornua and at their ovarian termination become funnel-shaped, broadening out into what is known as the fimbriated extremity of the tube. They are attached to the ovary by their fimbria and are the medium through which the ovum is carried from the ovary to the uterus.

The uterus is a musculo-membranous organ, bi-cornual in character, designed for the reception, nutrition and protection of the developing fetus. Ultimately it also assists in the expulsion of the fetus at the time of parturition. In ruminants in the non-gravid state it lies wholly within the pelvis occupying a position between the bladder and the rectum. It is held in position by the broad ligament and its continuity with the cervical and vaginal walls. It is composed of three coats, mucous, muscular, and serous. The mucous coat is the physiological basis of the organ, for the fertilized ovum becomes implanted upon it and after the embryonic stage is past the placental membranes become attached to it. Once the placental structures become connected to the mucous membranes they are the medium through which the fetus is nourished while developing. Under the influence of pregnancy the uterus becomes greatly enlarged and pushes out into the abdominal cavity. The cervix or neck of the uterus is a strong sphincter-like segment of the genital tract. It is cylindrical in form, has strong dense walls, and remains constricted and closed at all times except under the influence of estrum and parturition. At estrum it relaxes and dilates somewhat and at the time of parturition it dilates to the full capacity of the pelvis. During pregnancy it is tightly constricted and its mucous lining secretes a specific form of tenacious mucus which effectually seals the cervix throughout the gestation period.

The vagina is a musculo-membranous canal formed by the walls of the pelvis extending from the cervix to the vulva. It provides passage for the fetus at birth and receives the male organ of copulation at the time of service. The vulva is the external orifice of the genital canal. On its floor is found the meatus urinarus and in its inferior commissure the clitoris.

The term sterility as applied to reproductive diseases in cows indicates a condition in which the animal is incapable of producing young. As to their origin, the diseases or conditions responsible for sterility may be congenital or acquired. As to their result, the lesions may be of such character as to cause permanent sterility or they may be only of a temporary nature and are amenable to treatment. Only a relatively small percentage of sterility cases have as their cause a congenital aberration or deformity. The greater number occur as a result of acquired genital disease and as sequels to abortion, retained placenta and infection. On occasions insidious chronic systemic disease is associated with sterility. In a few instances no lesion cases are met with in which it is impossible to demonstrate or locate a definite cause.

DISEASES OF THE OVARIES

Probably the most common affection of the ovaries causing sterility is spoken of as cystic degeneration of the ovisacs which leads to the manifestation of a perverted sexual desire termed nymphomania.

The causes of cystic degeneration are not definitely known, but the condition is most frequently seen in cows which have been subject to an endometritis and are quite commonly heavy milk producers. The disease is as a rule confined to one ovary, although both may be affected. In the early stages as a rule only one cyst is found, but as the case advances more may develop. The symptoms are quite characteristic making diagnosis relatively easy. Usually these cases first manifest the disease by the too frequent appearance of estrum, and when in the company of other members of the herd they continually try to mount them and very often stand to be mounted. Their voice changes and they bellow and roar much the same as the bull. The disease is chronic and insidious, and as it becomes more established affected animals gradually lose flesh and drop off in the milk secretion. Coincident with the progress of the disease certain pelvic deformities take place in which the tail head rises, the depressions on either side of it become more marked, and the external genitals assume a somewhat horizontal position. By rectal examination one or both of the ovaries will be found to be much enlarged and contain a tense, rounded cyst. The uterus of such an animal is usually lacking in tone and very often discharging abnormally.

The prognosis is rather unfavourable. Less than 50% of the cases recover when treatment is applied. If long standing and well established the advisability of applying treatment is questionable except where owners demand it and in valuable breeding cows. In the handling of these patients they should not be permitted to mingle with other cattle. If milking, they should be dried off, and the diet provided should be sufficiently varied to meet the demands of proper nutrition. The actual remedial measure consists of rupturing the cysts by rectal manipulation with the hand. On occasions in old cases some difficulty may be experienced and care should be taken not to damage the walls of the rectum. If the wall of the cyst is found to be too resistant to rupture through the rectum, the ovary may be transferred to the other hand in the vagina in which organ considerable more pressure may be applied without danger. In rare instances the operation may require a vaginal puncture with a cystic trocar or knife. The tendency is for the cysts to heal and refill, and they must be broken down as often as they appear until cystic formation ceases. When indicated irrigation and massage of the uterus is advisable. Such cows should not be bred while under treatment and not until the estral cycle has become normal.

RETENTION OF THE CORPUS LUTEUM OF PREGNANCY.—Occasionally after parturition and during the time cows are milking heavily they do not manifest signs of estrum. This condition may last for a few months or for a much longer period of time. Cases are on record in which the absence of estrum persisted for over two years. Providing there is no other genital disease these cases occur as a result of the inhibitory influence of a persistent corpus luteum which has remained on the ovary. Such cows tend to continue the secretion of milk over long periods of time and as a rule fatten somewhat. The reasons for the persistence of a corpus luteum are not known, but if it is responsible for the absence of estrum such cases are easily rectified. The procedure consists of the rectal manipulation of the ovary and dislodgement of the corpus. This

is accomplished by grasping the ovary between the thumb and fingers and applying sufficient pressure to dislodge it. As a rule an animal so handled will appear in season in from two to five days, at which time she can be bred and may conceive.

OVARITIS OR INFLAMMATION OF THE OVARY.—The ovary occasionally becomes involved in inflammatory processes through infection and by extension from other parts of the genital tract. Under these influences adhesions form and the functions of the ovary are permanently interfered with. The normal ovary is quite loosely attached and can be readily moved about. With adhesions, however, it will be found to be more or less tied down and not easily manipulated. Such cases are most frequently seen associated with salpingitis. If the condition is unilateral conception may occur, but if both ovaries are affected permanent sterility results.

SALPINGITIS OR INFLAMMATION OF THE OVIDUCT.—By reason of their continuity with the apices of the uterine cornua the oviducts are occasionally involved in disease. Inflammatory lesions developing in the tube occur chiefly as the result of an extension of an infective process from the uterus. They appear in two forms. One in which a cystic dilation of the tube takes place with formation of adhesions along its course and with the ovary. The other is characterized by the development of nodules in the tube and may be difficult to diagnose. The former is the most common lesion recognized. Both conditions if bilateral cause permanent sterility and the diagnosis of such cases is only of value in that the operator can prognose definitely.

STERILITY DUE TO UTERINE DISEASE

The uterus is the most common seat of disease phenomena which cause sterility. Its function, position and form lends itself to the occurrence of disease, and in addition chronic inflammatory lesions frequently follow abortion and retained placenta which are very prevalent.

CHRONIC METRITIS.—This term is applied to a chronic inflammatory process in the structure of the uterus. It occurs as a sequel to an acute metritis, to infection, abortion and retained placenta. It ultimately leaves the organ hard and indurated with the formation of adhesions to its related structures. In addition the destruction of the utricular mucous membrane very often takes place. In the early stages a muco-purulent discharge is seen. By rectal examination the uterus will be found enlarged and sensitive to manipulation. As the disease advances the uterus becomes hard, indurated and very often adhesions form on its serous surface. Treatment is not to be recommended in long standing cases where the uterus feels exceptionally hard and adhesions are present. In the early stages, however, benefit may be obtained by uterine irrigation with warm antiseptic solution and the use of a small return flow catheter. Massage and manipulation of the organ are also of value. Solutions which may be used are 2% sodium bicarbonate, saturated boric acid and weak solutions of some of the chlorine antiseptics. If the character of the discharge does not improve in the course of 3 or 4 irrigations inject directly into the uterus a 5 to 10% silver nucleinate or argyrol solution. Mercurochrome in a 1 to 5% solution may also be used. A long nozzleed dose syringe or catheter may be used for this purpose. Inject from 1 to 2 ounces of this solution. It is harmless and materially assists in overcoming uterine infections. Treatment should be continued until all abnormal discharges have ceased. In some cases the internal administration of a course of potassium iodide is of value.

CHRONIC ENDOMETRITIS.—This term indicates an inflammation of the endometrium in which the mucous membrane of the uterus alone is involved. It is probably the most common condition responsible for sterility in breeding cows. The causes are much the same as those mentioned for metritis but is not so serious for only the endometrium is affected. The symptoms are similar except that the organ is not so sensitive or swollen and adhesions are not likely to form. Such a uterus is prone to be flabby and lacking in tone and to discharge abnormally. In some cases the animal fails to manifest estrum as well. Treatment consists of uterine irrigation, massage and manipulation. The use of silver nucleinate or argyrol solution, and if the cow does not come in season the manipulation of the ovaries to stimulate ovulation and estrum.

PYOMETRA.—This is an abnormal condition of the uterus in which the organ is distended with accumulated pus. It occurs as a sequel to abortion, retained placenta, metritis, and infection. It also requires the obstruction of the cervical canal by stricture, adhesion or other lesion in order to prevent the discharge of pus. Such uteri are usually lacking in tone and incapable of contraction. Death of the fetus in early pregnancy with decomposition and solution of the fetal body is another source of pyometra. Quite often cows affected do not come in season. The general symptoms noticed are not very significant and there may not be any visible manifestations. Some cows remain in good flesh and even show a tendency to fatten although they seldom have a glossy coat. Others show dullness and a lack of thriftiness and may run a little temperature. Diagnosis can only be definitely determined by a rectal examination in which the uterus will be found to be distended with a heavy fluid. Its walls are usually thickened and the organ is drawn forward over the brim of the pubes. It may be differentiated from the normally gravid uterus by the fact that it is much more tense and does not fluctuate under palpation to the same extent. Both horns are equally distended and the body of the uterus is enlarged as well. The character of the pus varies depending on the length of time the disease has existed and also the nature of its cause. The mucous membrane of the uterus is often destroyed under the influence of the disease. Long standing cases are invariably permanently sterile. In early cases treatment may be of value and consists of draining off the pus through catheter, irrigation and massage. The return of estrum should be stimulated as well.

CERVICITIS.—A cervicitis is frequently seen and very often in conjunction with endometritis. It occurs as a result of injury, by infection and by discharge passing continually through its lumen from a diseased or infected uterus. It may exist in the acute and chronic form. In the acute form the organ is sensitive, bleeds easily, is much enlarged and discharging muco-purulent material. Treatment consists of hot vaginal douches, the application of argyrol solution to it and into the cervical canal. In the chronic form the cervix is indurated and hard. Very often the cervical canal is too open and discharging. An open cervix, while not necessarily interfering with fertilization and conception, lends itself to the infection of the uterus, and early abortions frequently take place under these circumstances. Such cows will conceive and apparently settle for a few months only to abort and reappear in season again. Abortions of this nature often occur unnoticed by the herdsman. Treatment consists of hot vaginal douches, the application of a 1% Lugol's solution of iodine to the cervix and manipulation of the organ.

VAGINITIS.—The vagina is occasionally the seat of infections which interfere with the reproductive function. Outbreaks occur in which practically all of the

female members of the herd are affected. An infectious vaginitis usually manifests itself by swelling of the vulva, muco-purulent discharge, an inflamed mucous membrane which bleeds easily and ultimately the formation of small nodules. During the course of this disease conception rarely occurs and the sheath and prepuce of the bull may become infected. Virgin heifers at the age of sexual maturity are often particularly difficult to get settled in calf. Treatment consists of the isolation of affected members of the herd as far as possible. Vaginal douches of warm, mild antiseptics and the swabbing of the vagina with a 5% silver nucleinate solution. The latter is one of the most effectual applications in this condition. Service should be prohibited during the treatment and the sheath of the bull subjected to similar handling if there is evidence of infection.

BLACKLEG UNDER UNUSUAL CIRCUMSTANCES.

The occurrence of Blackleg in cattle while they are being stabled is extremely rare, but the following case is an illustration of the fact that it may happen.

Clinic No. 52, December 5th, 1928.—The subject of this clinic was an Ayrshire calf about eight months old which had been in good health and at the time of the attack was in splendid physical condition. During the summer while being raised she had been allowed out in a paddock with other members of the herd, but for the last two months was confined to the barn and kept in a roomy box stall. She took sick on the evening of December 4th when it was noticed that she refused her food. The following morning she was much worse. She remained in the recumbent position and was very reluctant about rising and stiff in her movements. Her temperature was 104.5° F. A small dose of epsom salts was administered and also diffusible stimulants. No improvement was noticed and by evening she was lame in the right hind leg and it was swollen. The tumified area was in the larger groups of muscles and crepitant. Because of these typical manifestations a clinical diagnosis of Blackleg was made. During the night the animal died and the following morning a post-mortem examination was held. In the sub-cutis many emphysematous areas were noticed, particularly over the larger groups of muscles, and when they were incised they were found to be dark red, hemorrhagic and infiltrated with gas.

To substantiate the diagnosis tissue specimens were taken from the diseased areas for bacteriological examination. Animal inoculations with material obtained from the specimens were positive. By cultural methods the typical and characteristic growths of the organism were demonstrated. Stained smears also revealed the presence of the Blackleg bacillus. In this instance the avenue of infection in all probability was by the ingestion of contaminated food. In endeavouring to trace the source of infection it was learned that the calves were being fed silage grown on low-lying land to which drainage came from known Blackleg infected premises. All of the cattle in the barn of susceptible age were vaccinated at once and the use of the silage as an article of diet was forbidden until immunity had been established. No further cases occurred. Blackleg aggressin was the immunizing agent used to protect the remainder of the herd.

MALIGNANT CATARRHAL FEVER OF CATTLE

This is an acute, non-contagious infectious disease of cattle which is characterized especially by an inflammation of the mucous membranes of the head, with a tendency to formation of pseudo-membranes and ulcerations. The eyes

are usually markedly affected with an intense conjunctivitis and lachrymation. Nervous symptoms and high fever are also characteristic of the disease. While this disease is not common in Canada occasional cases are encountered and the following clinic is an example.

Clinic No. 25, November 13th, 1929.—The animal affected in this instance was a four-year-old Angus cow. She had been on pasturage during the day but was stabled at night. She went off her feed rather suddenly, and showed some symptoms of frenzy and her temperature was 106. She was placed in a box stall isolated from other members of the herd. On the second day lachrymation, conjunctivitis and an opaque appearance of the cornea were noticed. At the time of examination the eye symptoms were very marked, and long strings of mucous and saliva were hanging from the mouth and nares. The skin felt dry and tight and the hair was roughened. The mucous membranes of the mouth and nostrils were intensely inflamed. There was a complete loss of appetite, although the patient would drink a little. Dyspnoea was evident due to the swelling of the respiratory mucous membranes and fever. She retained the recumbent position most of the time and appeared to be very depressed. During the progress of the disease the breathing became more stertorous, and on the mucous membranes of the mouth vesicles appeared leaving raw bleeding areas. Medicinal treatment did not appear to afford any relief and on the fourth day she died. A post-mortem examination revealed an intensive inflammatory reaction in the mucous membranes of the larynx, trachea and bronchial tubes, with evidence of the commencement to form pseudo-membranes in places. Bacteriological examination of material obtained was negative in so far as the presence of any specific organism was concerned.

In the early stages this disease might easily be confused with hemorrhagic septicemia and particularly the respiratory form of that disease, but the intense inflammatory reaction in the mucous membranes of the head with copious discharges serves to differentiate as well as the fact that it is not contagious and not confined to the younger animals of the herd.

TRAUMATIC PERICARDITIS IN CATTLE

The migration of a sharp pointed foreign body from the reticulum to the pericardium and heart is a relatively common accident in cattle. In many instances such an occurrence is followed by the loss of the animal. In the early stages the definite diagnosis of a reticular puncture is attend with considerable doubt. In this stage operative procedure for the relief of the condition is of value, but once the condition has become well established an operation can scarcely be justified. The following reports of two cases are examples.

Clinic No. 129, January 18th, 1929.—This patient was a grade Shorthorn steer two and one-half years old. He had been purchased as a feeder in November and was allowed to range on pasturage for a month, after which he was taken in to be stable fed. Shortly after being stabled it was noticed that he was affected with some form of a digestive disturbance for which the owners had administered cathartics and subsequently digestive tonics. They felt that some improvement was gained although he did not thrive and continued to lose flesh. Finally swellings appeared on tissues around the sternum which ultimately extended as far forward as the intermandibular space and as far back as the sheath. At this time he was submitted to the College clinic for diagnosis.

The symptoms were characteristic. Extensive oedema, a fixed thorax, extended head and neck, engorged jugular veins, abnormal heart sounds. Ap-

petite poor and no rumination. Animal rapidly losing flesh. The owner was informed of the diagnosis and also given an unfavourable prognosis. However, an operation was requested.

The animal was given chloral hydrate in sufficient quantity to dull the senses but not to anaesthetize him, and placed on the operating table. The operation decided upon was to resect a portion of the eighth rib for the purpose of exploring the pericardial sac to find the foreign body and to evacuate it. The operative site at the ventral extremity of the rib was shaved and rendered aseptic and thoroughly infiltrated with a local anaesthetic. A cutaneous incision about ten inches long was made over the eighth rib and then the rib exposed and dissected from its muscular, ligamentous and pleural attachment. It was sawed off eight inches above its sternal articulation and removed. Until this stage of the operation was reached there had not been any undesirable manifestations on the part of the patient. It was anticipated, however, that when the pleural cavity was opened considerable shock would be experienced and such was the case, for in a short time after the atmospheric air gained entrance to the thorax the animal expired. Precaution had been taken to make the initial pleural incision small so that the air only gained entrance slowly, but in spite of this he soon succumbed. The pericardial sac was opened, however, and found to be greatly distended with blood stained pus, and by digital exploration of the cavity a piece of wire about five or six inches in length was found.

It is quite possible that if the animal had not been so markedly debilitated he would have undergone the operation successfully, but the fact that this procedure is interfering with two vital functions, namely, that of respiration and the heart, greatly increases its hazard.

Clinic No. 303, April 18th, 1929.—In this instance the animal affected was a Holstein cow which had been milking for some time and was still producing about 40 pounds a day. On April 5th she became indisposed with some obscure digestive ailment, for which the owner gave a saline cathartic followed by digestive tonics. Again, as in the preceding case, it was felt that some improvement had occurred, but it was noticed that she remained in the standing position and when recumbent would grunt and moan as if in pain. The milk secretion had dropped to fifteen pounds per day. On the 18th of April she rather suddenly became much worse, refused all food and would not ruminate. The owner stated that rumination was difficult and the regurgitation of food was attended with pain ever since she had first taken sick. When examined it was noticed that she held the thorax fixed, was reluctant in her movements and held the head somewhat extended. The pulse was much too frequent and weak. Temperature 102° F.

A diagnosis of reticular puncture with reticulitis and possible pericardial involvement was made. In the way of treatment an exploratory rumenotomy was suggested to which the owner was agreeable, but before doing this another means of relieving the condition was tried which in this instance proved successful. The cow was taken out in front of the barn, cast and rolled on her back. While in this position the operator, by means of his foot, forcibly shoved back on the abdominal viscera at the posterior extremity of xyphoid cartilage on the left side. This kneading manipulation was performed several times and then the animal was allowed to get up. The owner was instructed to build her stall up in front so that when she was either lying or standing the body would slope to the rear. Much improvement was noticed the following morning, and in three days she was back to her forty pounds of milk production again.

The intention of such manipulation is to cause the return of the foreign body to the reticulum, and the writer believes that such procedure is worthy of a

trial in the early stages of those cases in which it is felt that a reticular puncture has taken place. In this instance it was attended with good results. The results also tend to substantiate the diagnosis, for it is extremely improbable that any benefit would be derived by that procedure in animals affected with some other form of digestive disturbance. Even if it does not cause the return of the foreign body it may alter the direction of it toward less vital structures than the viscera of the thorax.

DYSPEPSIA OR INDIGESTION IN A HOLSTEIN BULL

Digestive disturbances of cattle are sufficiently varied in character to keep the keen practitioner interested in diagnosis. The following case is one in which a consultation was requested.

Clinic No. 428, September 24th, 1929.—At the time of this examination the animal had been ailing for a week. When he first took sick the owner had administered four pounds of epsom salts following which the animal vomited and later purged. He appeared somewhat improved for a few days but did not regain his appetite. Veterinary advice was obtained and it was felt that by the administration of laxative doses of linseed oil and stimulative doses of barium chloride and tartar emetic he would regain his appetite, but little if any improvement was noted. Examination revealed a somewhat full appearance to the abdomen, and on palpation over the abomasum sensitiveness was manifest. The attendant stated that the patient remained lying down most of the time and would grunt on expiration. His appetite was gone and he drank but little. After a thorough consideration of the case it was decided that in the initial stages there probably had been an abomastitis and as a sequence a dyspeptic condition. The treatment applied was first the administration of a brisk purge consisting of aloes 6 drachms, calomel 1 drachm, and fl. ext. cascara 2 drachms in capsule. An ounce of ammonium carbonate was also given. To follow, a digestive tonic mixture was provided consisting of the fl. ext. nux vomica 1 ounce, the fl. ext. zingiberis 1½ ounces, elixir of lactated pepsin 4 ounces, and dilute hydrochloric acid to twelve ounces. The mixture was administered 3 times daily in 1 ounce doses. The attendant was advised to tempt the animal with appetizing food and exercise him a little every day. Under the influence of this management and treatment the animal soon recovered and did well.

While it is admitted that the saline cathartics are of value in many instances, the writer questions the advisability of using them in the more serious cases for they tend to extract fluids from the tissues which may already be somewhat dehydrated. They also weaken and neutralize many of the ferments or enzymes concerned in the process of digestion.

CONGENITAL DEFORMITIES IN CALVES

The occurrence of deformities in new-born animals is occasionally the cause of losses, and in some instances the lesions are quite interesting in their character. A number of these cases have been presented to the College clinic for examination during the past year. The following are reports of two cases of this nature.

A GALL BLADDER WITHOUT AN EFFERENT DUCT.

Clinic No. 14, November 13th, 1928.—This calf was two weeks old when presented to the clinic for examination. The owner stated that at birth it

was a big, strong, thrifty calf, but in spite of the fact that it was well fed and cared for it would not thrive and progressively became worse. When examined it was apparently affected with some form of a digestive disturbance, for it was scouring and appeared slightly bloated. A tentative diagnosis of milk indigestion was made, and instead of feeding milk the calf was put on barley water and given an antacid digestive tonic. No improvement was obtained, the animal gradually growing weaker until it was considered a hopeless case. It was then humanely destroyed and a post-mortem examination made. The stomach and intestines were distended with gas and also contained highly offensive fecal matter. There were some indications of enteritis. With the exception of the liver the other abdominal viscera were apparently normal. The liver was friable and of a greyish colour. The gall bladder was enormously distended and contained a large amount of bile of about the consistence of mucous. On closer examination it was found that there was no outlet from the gall bladder to the intestine. By the closest scrutiny not even a vestige of the duct which leads to the intestine could be found. The bile, being one of the essential digestive secretions, it was felt that the condition of the calf was primarily caused by this congenital deformity.

A CONGENITAL OCCLUSION OF THE RIGHT PAROTID DUCT.

Clinic No. 267, April 2nd, 1929.—The subject of this clinic was a purebred Shorthorn calf about a month old. The right parotid region was somewhat swollen and enlarged and the course of the duct could be traced by an enlargement of it from the gland to the point of the face where it empties into the mouth. The owner stated that the condition had existed from the time of birth and that it apparently had not interfered with the health of the calf. The duct felt somewhat thickened but was not sensitive. An attempt was made to locate the opening with a probe without success. It was then decided to leave it alone for it was felt that the gland would ultimately atrophy and the enlargement disappear.

TUMOR OF THE PENIS IN A YOUNG BULL

Clinic No. 166, February 12th, 1929.—The animal affected in this instance was a purebred Shorthorn bull which was being used for service. The attendant noticed a tumorous growth on the penis which would bleed at times. He was submitted to the clinic for operation. Restraint was accomplished by the administration of chloral hydrate and securing him on the operating table. The sheath was irrigated and cleansed with an antiseptic solution. The penis was then exposed and held with a gauze bandage which also served as a tourniquet. The tumor had a constricted neck and was located on the left side of the penis just at the point where the fold of the sheath is reflected upon the penis. The tissue around the base of the tumor was infiltrated with a local anaesthetic and the tumor excised with scissors. Subsequent treatment consisted of a few irrigations of the sheath and service was prohibited for a month. A specimen of the tumor was taken for section and microscopic examination. The report of the pathological department indicated an epithelioma of a benign character. Subsequently the animal was sold to be used as a herd sire and a report six months later revealed that there had not been any recurrence of the growth and that the animal was proving satisfactory as a sire.

EPIDURAL ANAESTHESIA

During the 1926 meeting of the American Veterinary Medical Association Professor Benesch of Vienna demonstrated a new type of regional anaesthesia to the veterinary profession. The application of this relatively simple operation has a wide range of usefulness in cattle practice and any practitioner who is not taking advantage of it is missing a splendid means of restraint in conditions associated with continued expulsive efforts or straining. Veterinarians are learning that this form of regional anaesthesia has a wider application than was at first thought. Not only is it being used for an increasing number of conditions affecting cows, but the principle has been applied in horses, swine, dogs and cats. The anaesthetic is not always injected in the same region but the final effect is much the same.

Procaine is the anaesthetic used in a 1 to 2% solution. The site of the injection in cows is in the first intercoccygeal space between the first and second coccygeal vertebrae at which point the spinal canal is readily pierced. The point of injection can be readily ascertained by palpation of this region. A depression can be felt and if the tail is grasped and moved up and down it will be noticed that motion takes place at this point to a greater extent than it does at any other intercoccygeal space. A 16 gauge needle from 1½" to 2" long may be used. It is plunged into the space and when it reaches the bottom of the spinal canal is slightly withdrawn and the injection made with a 20 or 30 c.c. hypodermic syringe. Care should be taken to shave and sterilize the operative site and to have the solution sterile. The amount of the solution used depends upon the degree of anaesthesia required. Ten to fifteen c.c. will anaesthetize the pelvis. Twenty c.c. may put a cow off her hind legs. The indications for its use are to control expulsive efforts in dystokia, in prolapse of the uterus or the vagina or following their replacement. For any surgical or obstetrical operations in the region of the external genitals and perineum. In the male for operation on the penis or scrotum. In a recent issue of the *Cornell Veterinarian* in an abstract by W. L. Williams of a report written by Professor Johannes Richter of the University of Leipzig, the author claims that this form of regional anaesthesia is of a great value in the manual removal of retained afterbirth. The greatest obstacles to the successful accomplishment of removing an afterbirth are expulsive efforts and contraction of the uterus and cervix. Epidural anaesthesia relaxes the genital tract, removes sensation and prevents straining so its value under these circumstances can be readily understood.

NAVEL ILL IN A FOAL

Clinic No. 420, September 9th, 1929.—The following report of a case of this nature reveals the character of the disease and also the persistence required to successfully overcome and treat such cases.

The dam of this foal had previously given birth to two foals and on both occasions the foal had died shortly after being born, and in each instance there was evidence of congenital infection. This foal was born on September 9th and it was given a protective inoculation of navel ill bacterin the same day. It was rather small, unthrifty looking and lacking in vigour. The umbilicus was treated with antiseptics. On September 11th it seemed rather dull and was stiff in its movements. The temperature was 103. A second dose of navel-ill bacterin was given. September 12th, temperature 103.5, symptoms more pronounced. About a pint of the dam's blood was drawn from the jugular vein into a sodium citrate solution and 100 c.c. of it administered subcutaneously. September 13th,

temperature 104, the right carpal joint swollen and very painful, to which an antiphlogistine poultice was applied. One hundred c.c. of dam's blood was administered. September 14th, temperature 102. The foal looked brighter and the lameness was much improved. At this time a swab was taken of the uterine discharge of the dam and on examination a haemolytic streptococcus found. September 15th, temperature 104. Foal lame in left hind leg, swelling at the fetlock joint. Another 100 c.c. of dam's blood administered. September 16th, temperature 103.6.

The umbilicus was slightly swollen and on removal of the dried-up stump of the cord pus flowed from it. Swabs were taken of the pus and cultures made in which was found a haemolytic streptococcus similar to that obtained from the dam's uterus. The umbilicus was irrigated with hydrogen peroxide solution and finally injected with a 2 per cent. mercurochrome solution. One hundred c.c. of the dam's blood was given and in addition 20 c.c. of a 1 per cent. solution of mercurochrome administered intravenously. September 17th, temperature 103.4. Foal lame in the left front leg but no swelling, and the lameness had disappeared from the other two limbs. There was some discharge from the umbilicus which was again treated with mercurochrome. The subcutaneous injection of 100 c.c. of the dam's blood and the intravenous injection of 20 c.c. of a 1 per cent. mercurochrome solution were repeated. September 18th, temperature 103.6, but the foal appeared bright though still quite lame. The dam's blood and mercurochrome solution were again administered. September 19th, temperature 103.6. Foal attempted to play in spite of lameness. The discharge from the umbilicus had ceased. September 20th, temperature 103. From this date on the temperature gradually dropped to normal. The foal became brighter, would play, and the lameness disappeared.

Remarks.—It is difficult to estimate the value of the various means used to combat the disease in this instance. The writer feels that the navel-ill bacterin was of no value. Certainly it did not prevent the occurrence of the disease and it is not likely that it had any curative effect. Following the first two injections of the dam's blood there appeared to be a curative effect for the temperature went down to 102, but the case became acute again and it was not until after the mercurochrome had been administered intravenously that any lasting benefit was obtained. Another significant feature is that recovery did not take place until the dried gangrenous stump of the umbilical cord was removed and the pus permitted to escape. This was coincident with the intravenous injections of mercurochrome. At the Ontario Agricultural College all the foals were given a protective inoculation of a navel-ill bacterin at birth this past season. It is impossible to estimate the value of this procedure for there were no controls, and even if there had been it would be impossible to tell whether they had been infected or not. This much may be said, however, that none of the foals developed the disease after they were two weeks old, which is about the length of time required to produce an artificial immunity. Two of the foals died from septicemia in a day of two after birth. The case reported in this article developed navel ill when about two days old, so it may be inferred that the bacterin is of no value to prevent early cases.

THE CURE OF TETANUS IN HORSES BY THE USE OF LARGE DOSES OF
TETANUS ANTITOXIN

The following reports of three cases of tetanus in horses and the amount of antitoxin used indicates its value.

Clinic 298, April 22nd, 1929.—This animal was a purebred Percheron mare which the attendants had noticed somewhat stiff for several days prior to the diagnosis of the case. When examined she presented all the symptoms characteristic of the disease. She was placed in a darkened stall and kept quiet. Thirty-seven thousand units of tetanus antitoxin was administered at once, part of it intravenously and the remainder subcutaneously. This was all of the antitoxin available at the time. One hundred and fifty thousand units were obtained and the next day she was given fifty thousand intravenously and twenty-five thousand intramuscularly. The following day some relaxation of the tetany could be observed but she was again given twenty-five thousand units intravenously and fifteen thousand intramuscularly. On the morning of April 25th improvement was so marked that it was decided to discontinue any further use of the antitoxin. In a week's time she was turned out on pasturage and she soon recovered completely. No other treatment was employed.

Clinic No. 341, June 2nd, 1929.—This was a consultation case. The animal affected was a sixteen-year-old mare of rather nervous temperament. As in the preceding case the symptoms were well marked and the jaws tightly set. As an initial dose, sixty thousand units were given, thirty thousand intravenously and thirty thousand intramuscularly. She then received twenty thousand units daily for five days, making one hundred and sixty thousand units in all. This animal made a good recovery. In the handling of this case it would probably have been more effectual to have given larger initial doses than to spread the administration of the antitoxin over a period of six days.

Clinic No. 411, August 31st, 1929.—The subject of this clinic was a black gelding which at the time the writer examined the case had been given one hundred and twenty thousand units of tetanus antitoxin. Tetany was still in evidence and in addition the patient was breathing heavily, the mucous membranes were diffusely injected and angry in appearance. The odor of the exhaled air indicated a gangrenous pneumonia. Another twenty thousand units were administered. The following day relaxation of the muscles was evident but the pneumonic symptoms became more pronounced and the animal succumbed.

The following communication is a copy of the reply to a letter to the Comptroller of the Connaught Laboratories (from whom the antitoxin was purchased for Case No. 1) in which the detail of the treatment was outlined to him.

"Dr. Defries and I are indeed obliged to you for your kind and interesting letter of yesterday's date. It is indeed gratifying to know you were able to save the mare referred to therein by giving her adequate doses of tetanus antitoxin before it was too late. You will, of course, appreciate that the whole secret of lockjaw therapy, either in humans or animals, is to give repeated large doses of antitoxin, starting at the earliest possible moment. In order to get sufficiently rapid absorption of the antitoxin, intravenous injections (and in humans in particular intraspinal injections) are most important supplements to the ordinary intramuscular injections." Signed, F. Lorne Hutchinson, Comptroller, Connaught Laboratories.

SHEEP AND SWINE CLINICS

LAMBING TROUBLE IN EWES

At the time ewes are giving birth to their young it is necessary for the successful sheep husbandryman to give them special care and attention. The care of the ewe during the pregnancy period is also of importance, for the character of the food and attention a ewe has had during gestation is always reflected in the vitality and vigour of her newborn. It should always be remembered that the nutritional reserves of a pregnant animal are severely taxed to provide for the development of the fetus, and for that reason considerable thought should be exercised in providing a suitable ration for them. Salt, and preferably iodized salt, should be available for them at all times. A clean, plentiful supply of water. Some leguminous roughage, such as alfalfa or clover hay along with other forms of roughage. A little grain composed of oats, bran and a small amount of oil cake. Bonemeal at the rate of 3 pounds to the 100 pounds of grain is also of value, particularly in districts where nutritional deficiencies are known to occur. Exercise is another important feature in the care of the pregnant animal. Some means should be taken to insure plenty of exercise every day for them. Within a week or two of lambing the quantity of the diet should be reduced somewhat and if anything made more laxative in character. When the lambing time arrives ewes should be watched and placed in a separate pen for a time. If they have been properly cared for it is not often that difficulty in lambing is experienced, but occasionally malpresentations occur which require adjustment before the lambs can be successfully delivered. Generally speaking this can be accomplished, for the genital passage of a sheep is quite roomy and will permit the introduction of the hand to correct any deviation from the normal.

During the past six or seven years since the College has been situated at Guelph a considerable number of cases of dystokia have been submitted to the clinic for relief. The majority of these cases have been of a somewhat different character to those ordinarily met with, and because of this fact it is felt that it would be advisable to include a reference to these cases in this report. The history given generally indicates that the owner noticed the ewe in labour pains. At first they may be periodic but ultimately straining is continuous and very often a prolapse of the vaginal canal occurs. By this time the animal is almost exhausted but continues to strain whenever she regains strength. No birth takes place, however. When examined it is usually found that the cervical canal has failed to dilate and consequently the young cannot be expelled. In some instances by careful manipulation the cervix can be dilated and the lambs removed. In other cases it is found impossible to do this without tearing the os uteri and a caesarian operation is performed. In all of these cases, whether the lambs are removed by the birth canal or through a laparotomy wound, it is invariably found that one of the lambs is dead. This finding has been so constant in these cases that the writer feels these are all cases of attempted premature delivery of the fetus. The death of one of the fetus takes place and the ewe attempts to expel it before the cervix has dilated, resulting in a prolapse of the vagina and continued expulsive efforts. Another feature of these cases is that the uterus is nearly always lacking in tone and does not contract normally after delivery. In some instances a prolapse of the uterus may take place due to continued expulsive efforts. They are rather unfavourable cases to handle, although in some instances the ewe and one or two lambs have been saved and in others a lamb alone has

been kept alive. In some of these cases triplet pregnancies had occurred; in others twins, but in all cases one lamb was found dead.

Clinic No. 278, April 8th, 1929.—This was a cross bred Leicester ewe which the owner stated had been in labour three or four days. The vagina and cervix were prolapsed, swollen and injured. The patient was in an exhausted state although she would continue to strain at times.

A replacement of the vagina was accomplished and attempt made to dilate the cervix. This was impossible without injury to it and it was decided to perform a caesarian operation. The ewe was then anaesthetized, a laparotomy incision made, the uterus exposed and the lambs removed. One lamb was dead and the other alive. The findings in this case are typical of this form of dystokia. When inquiry is made into the history it is usually found that the sheep are rather too fat and have not had enough exercise.

HEMORRHAGE FOLLOWING DOCKING IN LAMBS.

The practice of docking lambs while usually not attended with bad after affects is occasionally followed by hemorrhage or infection which may cause loss in the lamb crop. The following report is an example of a case.

Clinic No. 318, May 11th, 1929.—The carcass of the lamb was brought in for examination. It was learned that the lamb had been docked the day previous and had bled profusely. Some attempt had been made to control the hemorrhage but during the night it apparently started to bleed again and it was found dead in the morning. A post-mortem examination revealed a very anemic carcass and as there was no evidence of disease a diagnosis of death due to hemorrhage was made.

The proper time to castrate and dock lambs is at about two or three weeks of age. The operations at that age cause very little inconvenience but if they are allowed to get much older the risk is much greater. The animals operated on should be kept under observation for a time so that attention may be given to any which appear to be bleeding excessively. Antiseptics should also be applied to prevent infection of the wounds.

HEMORRHAGIC SEPTICEMIA IN SHEEP.

During the last few years there has been an increase in the frequency of the occurrence of this disease in sheep. It is most commonly met with in the spring of the year after the sheep and their lambs have been turned out to pasture, or in the fall of the year when the change to the colder season is manifest.

Clinic No. 352, June 12th, 1929.—In this instance two lambs were submitted to the clinic for examination. One had died on the way in and the other was still alive. The owner stated that these lambs were running out with their mothers. The dead one had been sick about a week. The other became affected similarly but more acutely. The symptoms manifest were jerky abdominal breathing, nasal discharge, conjunctivitis (slight), occasional cough and a temperature of 106.2. A diagnosis of pneumonia was made. A post-mortem examination of the dead one was held and the thoracic viscera were extensively involved in disease processes. Pneumonia, pleuritis, and pericarditis were evident. The bronchial lymph glands were swollen, inflamed and oedematous. Organized fibrinous exudate and serum were found in the pleural cavity.

Bacteriological examination of material taken from the thorax revealed the presence of the bi-polar organism of Hemorrhagic Septicemia. The owner was advised to isolate any apparently infected animals, to have the antiserum administered to them and to protectively inoculate the healthy members of the flock at once. This was done and no further losses occurred.

LEUKEMIA OR PSEUDOLEUKEMIA IN PIGS?

Leukemia is a severe and general systemic affection associated with a marked increase in the number of leucocytes in the blood and also with an enlargement and proliferation of the lymphoid tissue in the spleen, lymphatic glands and bone marrow. The disease is attended with progressive anemia and increasing exhaustion.

Pseudoleukemia is defined as a chronic affection in which the blood forming organs show much the same changes as in leukemia. The increase in the number of leucocytes, however, is absent. The picture accompanying this report illustrate a case of this nature, the details of which are as follows.



Illustration showing the enlargement of inguinal group of lymph glands which is representative of all the body glands in this case.

Clinic No. 389, August 19th, 1929:—A Yorkshire pig 4 months old being fed for market along with a number of others about the same size and age. It was noticed that this pig was not nearly so thrifty as the remainder of the herd and it had not been doing well for some time. Swellings developed at first in the region of the external groups of inguinal lymph glands and subsequently in the region of the throat. At the time the patient was brought in for examination, enlargement of all of the superficial lymph glands was quite evident. They did not seem to be sensitive to manipulation but felt hard, indurated, nodular and greatly enlarged. The animal was placed in clean, dry, comfortable quarters

and confined in an indoor pen. He was provided with a ration composed of oat chop, wheat middlings and skim milk, a little bonemeal was added to the grain mixture. No medicinal agent of any kind was given.

When the animal was first brought in a blood count was made for the purpose of determining the number of leucocytes present. Normally there are about 8,000 per cu. mm. of pig's blood. In this examination it was found that there were 14,000 and the increase was largely in the polymorphonuclear, indicating the possibility of some infection being responsible for the condition. In a week's time under the changed surroundings and individual care much improvement could be seen. The enlarged lymph glands were rapidly reducing in size. The pig was looking much better and feeding well. Breathing was normal. Another blood count was made and the number of leucocytes had reduced to 7,800 per cu. mm. and he showed a 70% hemaglobin test. In the course of a few weeks the animal became normal, the lymphatic enlargements having entirely disappeared.

An explanation of this case is difficult for while it manifested some of the typical indications of leukemic affections, at the same time recovery was so prompt and complete that the diagnosis might be questioned.

CONGENITAL DEFORMITIES IN YORKSHIRE PIGS

The increasing frequency with which such congenital deformities as scrotal hernia, cryptorchidism and hermaphroditism is being met with, particularly in the Yorkshire breed of pigs would indicate that breeders are either becoming careless in their selection of breeding stock or else that the Yorkshire breed is peculiarly disposed to the development of such deformities.

Since the College has been situated at Guelph upwards of 60 cases of scrotal hernia have been submitted to the clinic for operation. There have also been 20 cryptorchid pigs, 11 inguinal hernia cases and a number of specimens of hermaphroditism. With the exception of about 10% of these cases they all occurred in Yorkshire pigs. The few animals submitted to the clinic would in all probability only represent a relatively small percentage of the cases that actually exist. In practically all instances these animals could be successfully operated on but the rural citizen often neglects to have them properly handled and they represent considerable loss to the owner for if they are permitted to mature with one or more sex glands intact they become staggy and cannot be disposed of profitably. As a means of preventing the occurrence of these deformities swine breeders should be careful in the selection of their breeding stock for these are inherited weaknesses and there is a tendency to transmit them to their offspring.

Of all the domestic animals which are submitted for clinical surgery there are none in which surgical operations are performed that can be more successfully handled than swine. Hernia operations, laparotomies and such-like can be readily performed in pigs and with a reasonable amount of care and cleanliness no bad after effects occur. Even some cases of hermaphroditism are amenable to surgical correction.

PARASITISM IN PIGS

Clinic No. 41, November 26th, 1928:—The subject of this clinic was a Yorkshire pig about 11 weeks old. On enquiring into the history of the case it was found that this animal was one of a herd of 30, all about the same age, 10 of

which had died. They had been kept in rather unsanitary surroundings and were all very unthrifty. Mention was made of the fact that they all seemed very itchy.

The animal examined was very much emaciated and unable to stand and at the owner's suggestion it was humanely destroyed and a post-mortem held. The skin on the carcass was covered with scales and scurf, thickened and lying in folds. Many of the bristles had been rubbed off. A microscopic examination of scrapings from the skin revealed a large number of the sarcoptic mange mite of pigs in various stages of development. These mites were responsible for the itchiness manifest in the herd. On opening the abdomen and the viscera many roundworms were found. They were in the esophagus, in the stomach, in the bile ducts, and many more in the intestines. These parasites were without doubt the cause of the unthriftiness and debility seen in this bunch of hogs.



The roundworm of the pig—*Ascaris lumbricoides*.

The owner was advised to have his veterinarian dose them at once for roundworms and also to apply sulphur and oil to the surface of their bodies to get rid of the mange mites. Then to make a thorough clean up and disinfection of the stabling quarters.

DEPARTMENT OF ZOOLOGY AND HISTOLOGY

This department is responsible for work of teaching and demonstrating Histology, Embryology and Zoology to first and second year students. The usual routine of former years has been followed except for minor changes which were instituted where thought advisable. The advances made in the science of

biochemistry during recent years renders it imperative that the student of biology has a grounding in histology. A knowledge of embryology is useful as it forms a background for an understanding of genetics, obstetrics, histology and pathology, especially in relation to the development and structure of neoplasms. In the teaching of zoology much the same course has been followed as in previous years with special attention being paid to the anatomy and to the classification of the parasitic worms and arthropods as preparatory to a more advanced course in parasitology.

MEAT INSPECTION.

The course which is delivered to students of the senior year consists of lectures and demonstrations and is conducted with a view of giving the graduate who enters general practice a comprehensive knowledge of the subject and at the same time preparing students for entry into the Federal service under the Health of Animals Branch.

DEPARTMENT OF APPLIED PATHOLOGY

The work of this department is mainly that of diagnosis. Specimens of diseased tissue and organs are sent in by veterinary practitioners and stock owners from all parts of Ontario. Frequently the entire carcass of the smaller domesticated animals is submitted for examination. This service, in addition to benefiting the practitioner and the stock owner, provides a wealth of material for class work. Many of the carcasses are post-mortemed before the senior years as an adjunct to the laboratory work in Pathology and Parasitology. The specimens submitted form a valuable source of suitable tissue from which to prepare sections in order to illustrate the various disease conditions discussed in connection with the course in laboratory pathology. Live stock owners are yearly becoming more interested in the control and eradication of internal parasites, particularly those parasites infesting sheep and swine. A good deal of time and attention has been devoted to methods of control of parasites in foxes, and fox ranchers are frequently calling upon the college for advice in regard to problems connected with their industry. The college has for several years strongly advised the use of floors in fox pens and latest reports from ranchers are showing that properly constructed floors, together with cleanliness will materially check the spread of internal parasites. A report of work done in connection with this is incorporated in this report. In so far as the college records go it is believed that the amount of parasitic infestation in foxes is decreasing and that deaths among foxes directly traceable to internal parasites are much fewer than in former years. The fact that this is so is directly connected or is due in part to the advice and information distributed by various institutions of which this college has done its share.

The following table illustrates in part some of the work performed by this department. In addition to the items included in the table, samples of water, feed, e. g., hay, sweet clover, silage and grain have been from time to time

examined for suspected food poisoning. Cases of sweet clover poisoning have become uncommon, due no doubt, to the fact that stock owners are aware of the danger and are taking preventive measures and precautions.

Nature of Case	Cattle	Sheep	Horses	Swine	Dogs	Cats	Foxes	Rabbits	Fowl	Total
Tuberculosis.....	2			3			7		3	15
Tumors.....	5	1	4	5	14	2	2		5	38
Pneumonia.....	3	4	2	3	1	2	13	3		31
Parasites.....	4	4	1	7	10	1	210			237
Blackleg.....	2									2
Sweet Clover Poisoning.....	4									4
Gastro-enteritis.....	1	1	2	3	2	1	5			15
Abscess.....	2			1						3
Joint Ill.....	1									1
Peritonitis.....	1									1
Nephritis.....	1		1				1			3
Goitre.....				4	1					5
Meningitis.....							8			8
Actinomycosis.....	4									4
Leukaemia.....				1					6	7
Hemorrhagic Septicemia.....	3	8		7						18
Mastitis.....	3									3
Anaemia.....		2		14						16
Malignant Catarrh.....	2									2
Coccidiosis.....								4		4
Malignant Edema.....			1							1
Tissue from Operations.....	3		8		14	2				27
Liver Disease.....	3	1	6	1	3					14
Food Poisoning.....	2						3			5
Examination of Pus.....	1			1						2
" Semen.....			2							2
" Urine.....	1		3							4
" Meat.....	1			3						4
Miscellaneous.....	5	3	3	7	4	2	10	1	6	41
Total.....	54	24	33	60	49	10	259	8	20	517

THE DEPARTMENT OF PATHOLOGY AND PARASITOLOGY

The work of the department may be conveniently considered under the headings of tutorial, routine, research and investigatory.

Tutorial—Lectures and laboratory work, which constitute the major part of the educational programme, have been continued as in the past, with but minor alterations. In the instruction of the students the methods followed are those which tend to stimulate the mind and cause the student to think for himself.

Routine—The routine work of the laboratory consists chiefly in the diagnosis of diseased tissues, the making of post-mortem examinations, the examination of fox feces for the eggs of parasites, and the preparation of the abortion bacterin and vaccine.

Research—A number of experiments are being conducted with the object of determining the cause of anemia in suckling pigs. Experimental work in the cure of the same condition is also being undertaken. The feeding experiments with alsike clover commenced last year are being continued. Within a few

months we hope to be able to make a definite statement with regard to the relationship of alsike clover to endemic cirrhosis of the liver. During the year nutritional experiments with pigs have been undertaken in conjunction with Dr. A. A. Fletcher of the University of Toronto.

ABORTION VACCINE AND BACTERIN

The question of the continuance of the preparation and distribution of these biologics is constantly before us. The doubtful value of the 'dead culture' and the possible danger of the 'live culture' makes enthusiastic support of their use quite impossible. Undoubtedly there is but one way for the individual to attack the problem of abortion and that is to establish a clean herd and keep it so. But by any known method such a programme is at present out of the question for the great majority of farmers. And this quite as much due to their inertia as to the technical and economic difficulties. Our duty is still to educate those who are ignorant, stimulate the indifferent and to encourage the enlightened so that abortion-free herds may be a blessing of the near future. The continued demand for the live and dead culture is not due to any great faith in its virtue but due to the absence of anything better, and the need to have some palliative to meet the demands of the distressed stock owner.

We feel that the element of danger of human infection from the use of the live culture has been reduced to a minimum. During the last year the strains used in the preparation of the 'live culture' have been tested in guinea pigs for pathogenicity. The three strains used in our laboratory have been cultivated for more than six years on artificial medium. Cultures of these were injected intraperitoneally into guinea pigs, the dose used being approximately equal to the quantity regularly injected into non-pregnant cattle. The pigs were made quite sick for a period of about one week. All completely recovered and put on flesh. Post-mortem examination made four months later failed to reveal any gross lesions in any organs or tissues except the lung. Here in two cases the lung tissue showed areas of thickening. Microscopical examination revealed in both cases, marked cellular infiltration with endothelial cells predominating. As this condition may have been due to *B. abortus* we have decided not to use these strains in the preparation of the live culture until further experiments have been made. It is possible that this pulmonary infection was due to another cause. While it may be questioned whether the organisms have sufficient virulence to cause satisfactory immunity, it is more than probable that they are harmless to both man and animals. The attitude of public health officials everywhere is that of stern denunciation of the live culture. But it still seems to us that its use in badly infected herds is more productive of good than ill. There is general agreement that the number of abortions is reduced by its use. This in turn means a reduction in available infection for both animals and man. The use of the 'live culture' should be regulated as strictly as is possible. Our circular to this effect has been productive of some good, as evidenced in the increased demand for blood tests. During the year the following number of doses were distributed: Live Culture 2,652, Dead Organism 4,312.

We still deem it wise to proceed cautiously and to safeguard the distribution of live culture vaccine. Those applying for vaccine are definitely instructed that its use is only indicated in badly affected herds and are informed plainly as to the indications and precautions to be observed. This information is contained

in a special bulletin relating to infectious abortion and each time a request for vaccine is received a circular letter is sent containing the following salient points:

1. Abortion vaccine is only furnished to veterinarians, and those receiving the vaccine must assume responsibility for its proper use and administration.
2. Owing to the fact that the abortion bacillus (*Brucella abortus*) is infective to man (causing Undulant Fever), those procuring the Live Culture Vaccine must exercise due caution.
3. Where contagious abortion exists in a herd the milk from affected cows should be pasteurized.
4. The Live Culture Vaccine should never be used unless the abortion bacillus has been definitely established as being the cause of the abortion in the herd.
5. Neither the vaccine nor the bacterin is a specific cure for abortion disease and their use is only indicated in affected herds combined with sound measures of sanitation, segregation and sexual hygiene.
6. While the use of the vaccine may reduce the abortion rate it might be better in many cases to encourage owners to have their breeding cattle tested and to eliminate the reactors from their herds.
7. It is infinitely better to control the disease if possible than to attempt a cure with vaccines or other supposed remedies.

THE CONTROL OF INTESTINAL PARASITES IN FOXES

An address delivered before the Ontario Silver Fox Breeders Association by
H. E. BATT, B.V.Sc.

There is no doubt but that the breeding and raising of foxes is one of the most specialized lines of animal husbandry. It requires a great deal of skill, a great deal of patience and a great deal of hope to be successful, and you must always remember that the penned fox is entirely at your mercy. It cannot get out to help itself, therefore it is essential that you pay special attention to the feeding and hygiene of your foxes.

I am not going to begin to discuss all your problems; you know them better than I do. Three at least I can mention, namely, the problem of dietetics, that of disease, and that of parasites, and the greatest of these is parasites. I shall not dwell upon the subject of dietetics except to say that I think that conditions in this regard are improving as the years go by so that cases of sickness and death among foxes due to improper feeding are rarer than they used to be. I am not going to discuss contagious disease among foxes more than to say that in this regard you are fortunate because foxes are hardy animals and are not allowed to mix with their fellows to any extent, therefore the risk of contagion by direct contact is small. I shall speak a few words on the parasites of the fox, dealing more particularly with the eggs of parasites and with control.

It is better and cheaper to control parasites by hygienic methods than to be continually dosing the foxes in an attempt to remove the worms by medicinal means. Intelligent control of parasites involves a knowledge of the parasite's life history. Now a few words on what happens to the parasite egg when it is deposited on the floor of the fox pen. We know today that the parasites of the fox are like any other member of the animal kingdom in that they are the descendants of other pairs of parasites. Every parasite has parents. The old idea of spontaneous generation whereby parasites were believed to develop from filth or decaying matter is gone. We now know for certain that every worm had a father and a mother and that the adult worms which infest foxes can only live within the intestines or lungs of the fox.

Nature has provided the worms with a means to insure the perpetuation of their species in the fact that enormous numbers of eggs or ova are produced.

These eggs are passed out in the feces of the fox and are lodged on the floor of the pen. There they develop or incubate and they can at this stage withstand freezing and drying and can remain alive for long periods, especially if the bottom of the pen is damp. Ranchers go to a great deal of trouble to destroy these eggs. These efforts are often of little value because the eggs have a fairly thick shell and are often buried beneath the surface of the ground. The direct application of a strong disinfectant or actual flame is required to destroy the covering and injure the substance of the egg.

The Roundworm:—This is a common parasite, the adult form of which lives and thrives within the small intestines of the fox. The female roundworm produces large numbers of eggs which are passed out with the feces and thus reach the floor of the pen where, if conditions are favorable, such as moisture and a ground temperature of about 60°, incubation of the eggs begins and a larva forms within the egg. This takes about 21 days, according to the time of year and the amount of moisture present. After the larval worm is developed within the egg it is ready to infest another or the same fox again. The developed egg is taken into the mouth by licking the ground or paws or by being picked up in food. So soon as the egg reaches the fox's stomach the shell or capsule ruptures and a tiny larva emerges. This bores through the intestinal wall and reaches the fox's blood stream by which the larva is carried to the lung where it grows and develops for some days. After a time the young worm passes up the wind-pipe and is swallowed into the intestinal tract where it rapidly develops into the adult worm and so the life cycle is complete.

While in or upon the ground the egg requires somewhat drastic treatment to destroy it; a solution of lye made by adding 1 pound of lye to 3 gallons of water, or creolin solution, 1 part of creolin to 20 of water, or by using a fire gun. All these methods depend for their efficiency upon getting the solution or the flame directly upon the egg. The flame from a fire gun is perhaps most efficient, but even the flame is not infallible. I was on a fox ranch last summer where there was a fire gun in operation and I took a cigarette paper and buried it about one-quarter inch deep in the ground. The flame was then played over the spot for a little time but the paper remained uninjured because it was buried. Exactly the same would apply to buried eggs. These eggs will remain alive for months during winter weather and freezing will not kill many, so that in the event of cleaning up a pen do not count upon winter time to kill eggs. Exposure to drying winds and sunlight will in time kill the roundworm egg.

The Hookworm:—This worm has a life cycle somewhat similar to that of the roundworm. The adult worms inhabit the small intestines of the fox where they irritate the gut wall by their blood sucking, thus producing inflammation of the gut together with anemia. The eggs are voided with the feces and in summer soon hatch out a larva which feeds upon the fecal matter. In a few days the tiny larva, if it gets upon a fox, can bore through the skin and get into the blood stream. After a while it again reaches the intestines of the fox where it develops into the adult worm. If the larva cannot get on a fox it will in a short time go into a resistance state, that is, it shrinks up and can remain in this state, resisting freezing and drying, for months. These encysted larvae are taken into a fox's mouth and being swallowed they rapidly develop into the adult worm in the intestine. When the larva hatch out of the egg they are easily killed but after they go into the resistant stage they are difficult to destroy because of the thick capsule which surrounds them. The same methods which were used to destroy

roundworm eggs can be used in the control of hookworms and here again the flame or chemical solution must be applied directly to the egg, larva, or encysted larva.

The Lungworm:—This worm is the worst pest of the lot but fortunately we are overcoming them. The adult lungworm inhabits the lungs of the fox and its eggs are coughed up and swallowed and passing through the intestinal tract are voided with the feces. We are not very certain of the full life history of the lungworm but in all probability the egg hatches out a larva, the earth, as in the case of round and hook worms, acting as an incubator. These larvae are swallowed by the fox and boring their way through the gut wall reach the blood stream by which they are carried to the lung where they rapidly develop into the adult worm, thus completing the life cycle.

Parasitic Control:—I am a strong advocate of wooden floors. Some of you will not agree with me, but what are you going to do. The worm eggs are very small and are deposited in such enormous numbers by infested foxes that the ground or floors of pens are covered with them. Moving foxes out of infested pens into clean is an expensive business. Remember pilling the fox only rids the animal of the adult worms and reinfestation from the floor soon occurs unless the eggs are killed. Wooden floors are easily cleaned. The fire gun will almost surely get the eggs or larvae on a wooden floor, or chemical solutions can be applied with a very great certainty of the eggs being killed. In so far as lungworms are concerned, wooden floors will certainly eradicate them, always provided that the floors are kept clean of fecal matter and are flamed or chemically treated every week or so. The College has data in their records which show that wooden floors together with pilling and disinfecting will certainly keep the worms in check and will cure lungworm infestation, not in a week or so but in the course of a year, by which time badly infested foxes will be reasonably clean and their pups if raised on floors will be free from lung and hook worm. We find, however, that roundworm will persist in foxes kept on wooden floors but we believe that pilling and disinfecting will finally eradicate them.

In dealing with internal parasites always remember that "prevention is better than cure". This is the slogan of modern medicine whether human or veterinary. In the eradication and control of parasites always remember that the earth or floor of the pen is the incubator and that cleaning out the parasites from the foxes' intestinal tract is only half the battle. During winter there is little danger of reinfestation. This is a fact which enables many poorly kept foxes to partially rid themselves of the worms because the adult worms are not long lived. Winter is a great help in this respect. Indeed it is altogether probable that if it were not so many foxes could not survive the ravages of parasites. Do not depend upon winter too much. The relief is only temporary because the eggs will wake to life so soon as spring comes and the ground warms up.

Worm eggs upon a wooden floor are exposed to the effects of drying by sun and wind and development in the egg is retarded because a certain amount of moisture is required during the incubation period. Wooden floors should be built with a slight slope to carry off the water. Also remember that the wooden floors of themselves are not infallible but when used in conjunction with good hygiene, such as a daily cleaning and a periodical disinfecting or flaming, they are far and away ahead of the old dirt or gravel floor in so far as control of parasites are concerned. Worm eggs and larvae stay on the surface of a wooden floor where they can be readily destroyed, whereas eggs deposited upon earth floors

are often buried by the tramping and digging of the fox and so are protected from drying and from flame and disinfectants and in such cases the eggs often remain alive for months and perhaps a year or more.

The following table is compiled to illustrate some investigational work that was undertaken by the College in an effort to ascertain the hygienic value of wooden floors in fox pens in regard to the control of parasites. The experiment was carried on in cooperation with a rancher and under ordinary ranch conditions. These foxes were "pilled" in the usual manner, that is, according to the routine followed on a well conducted ranch.

In the fall of 1927 the foxes on the ranch in question were in poor condition, so much so that many were rejected by the Government Inspectors. An examination of their feces showed a heavy and wide-spread infestation by worms. Some of the animals were infested by hookworm, lungworm and roundworm, while every fox on the ranch harboured one or the other of these parasites. Lungworm infestation was heavy and several foxes died from pneumonia during the fall of 1927. The rancher was advised to put down floors in as many pens as possible with the result that by June 1928 fourteen pens were floored. The foxes were given vermicides in November and December of 1927. They were also treated in the spring of 1928. Therefore, any decrease in parasites noted in November and December 1927, also in the January 1928 test, are due to the treatment and to winter conditions, which last factor must be taken into consideration. It is a well known fact that parasitic infestation is often much decreased as winter progresses, the reason being that the eggs of the parasites lie dormant on the snow and frozen ground and thus reinfestation is to a large extent prevented.

Fox No.	November, 1927			December, 1927			January, 1928			September, 1928			October, 1928			January, 1929			Summer, 1929			October, 1929		
	Hook	Lung	Round	Hook	Lung	Round	Hook	Lung	Round	Hook	Lung	Round	Hook	Lung	Round	Hook	Lung	Round	Hook	Lung	Round	Hook	Lung	Round
1	+	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Not	exa	m'd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
6	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
7	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
8	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
9	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
10	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
11	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
12	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
13	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
14	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
15	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
16	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-	+	+	-
17	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1929 Pups																								
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

+—Ova present.
 —No ova present.
 -+—A few ova present.
 ++—Many ova present.

The above table is instructive in several ways. The remarkable fall in the amount of lung worm infestation between the spring and fall of 1928 (that is, after the introduction of floors) is worthy of note and is interesting because it

seems to bear out the findings of recent years, namely, that the control of the lungworm is largely one of hygiene rather than of medicine. It will be noted that the vermicides administered together with winter conditions, while influencing the round and hookworm, had little or no effect upon the lungworm. In the foxes numbered 4, 5, 12, 14, it will be noticed that the parasites peristed in spite of treatment and change from dirt to wood floors. These foxes, however, showed no marked symptoms of parasitic invasion although it is evident from the tests that they harboured a few internal parasites. The presence of roundworms are to be noted as occurring after the introduction of the floors in foxes numbered 1, 2, 4, 8, 9, 10, 12, 13. This fact is interesting and bears out the findings of other investigators, viz., that roundworms will persist even where floors are provided. Hookworms appear to gradually diminish. Numbers 1 to 17 are adults, some of them being 3 years old. The condition of the pups, numbers 18 to 24, are of interest. These were born into floored pens in the spring of 1929. They were given the regular vermicides as per ranch routine and were found to be practically clear of parasites in October 1929. Numbers 23 and 24 showed roundworm infestation which one pilling cleared up.

Conclusions

1. That the floors controlled the spread of lungworm and finally reduced the infestation to a minimum.
2. That the floors brought about a gradual decrease in the numbers of hookworms.
3. That roundworm will persist in spite of floors.
4. It is evident that vermifuges must be used in conjunction with floors and that the pens should be cleaned out frequently in order that round and hookworm be kept in check.

TUBERCULOSIS IN THE SILVER BLACK FOX

By F. W. SCHOFIELD, D.V.Sc.

The very rare occurrence of this disease in the fox and the unusual histology of the tubercles make a record of the outbreak advisable.

History. During the last twelve months out of a total number of twenty-two fox carcasses coming from the T—Ranching Co., a total of seven have shown distinctly similar and quite characteristic lesions. As a post-mortem examination is made on almost all the foxes dying on the ranch, one can definitely limit the infection to not more than one year's duration. The ranch is modern in both construction and sanitation, and meat from healthy animals, chiefly horse flesh, is used as food. Only one other case of the disease has come to our notice, and this in a fox which came originally from the infected ranch.

Macroscopic appearances. It would appear that the infection is always intestinal, as the primary lesion is constantly found in the mesenteric lymph glands. The glands are entirely altered, no normal tissue remaining. The lesion in the mesentery has usually spread to include the caecum, and attached to it may be adjacent portions of the small intestine. A mass, fairly firm, and somewhat diffuse, and varying in size from an almond nut to an egg, usurps the place of the mesenteric lymph glands. Incising the mass the tissue suggests a mixture of fibrous tissue, fibrin and coagulation necrosis. A serous fluid may

seep from the cut surface. The colour is yellow. No caseation or calcification is evident. In most cases metastatic foci were present in the internal organs. In the abdominal cavity the kidneys usually showed well marked lesions. These were in the cortex and appeared as small and large grayish-white nodules or masses. The liver lesions could only be distinguished with difficulty as minute glistening dark gray spots. Occasionally colonies of the growth were present on the capsule of the liver but only where one lobe was superimposed upon another. Foci of infection in the spleen were rare. In one case there was a well marked peritonitis with miliary tubercles covering the peritoneum. Next to the primary lesion the most extensive changes were found in the lung tissue. In the earlier cases the lung was riddled with miliary tubercles. In the later cases there was in addition a most extensive thickening and alteration of the visceral pleura, giving a peculiar scalloped appearance to the lung. The new tissue was dense and pearly white. There was no evidence of pleurisy, such as adhesions or exudate in the thorax. The lymph glands were swollen and appeared inflamed. There was no evidence of calcification or caseation. In all cases the disease was apparently acute.

Microscopic examination. The absence of some of the characteristic features of tubercle infection make these cases of interest and importance from the standpoint of diagnosis. The miliary tubercles consisted of colonies of cells which in morphology and staining closely resembled the plasma cell. The nucleus had not the typical "clock face," but the chromatin was irregularly distributed in the nucleus. In some cases the contrary was true, the majority of the nuclei showing solid staining. In shape the nucleus was essentially spherical although oval and elongated forms were not uncommon. In position the nucleus was usually excentric. The cytoplasm was densely placed around the nucleus, not as in the usual endotheloid cell where it appears extenuated and scanty. In staining, the cytoplasm took up the eosin with the intensity of a plasma cell rather than an endotheloid cell. Further, these cells while closely packed together never gave the appearance of giant cell formation. Only rarely were two nuclei seen in one cell. The majority of the very young tubercles such as those which appeared in the liver were composed entirely of this type of cell. In the older lesions large and small areas of necrosis were frequently seen. Fibrous tissue proliferation was variable being well marked in some cases and almost absent in others. In the pulmonary lesions fibroblasts seemed quite active, appearing in groups and strands throughout the mass of cells. This was most evident in the superficial tubercles in or near the pleura.

The earliest change noted in lymphatic glands consisted in an infiltration of the gland with the plasma-like cells. Every part of the gland with the exception of the germinal centre showed evidence of this cellular invasion. The capillaries were engorged with blood and the plasma contained some fibrin. In short, a well marked lymphadenitis was present. Later lesions showed areas of necrosis, and fibrous tissue proliferation.

Note. It is most probable that the endothelial cell in the fox differs somewhat from that seen in man and the ox in that it more closely resembles the plasma cell of these species. Small round cells—lymphocytes—were frequently present but were very few in number.

Animal Inoculation.—Guinea Pig. Two guinea pigs were given an intraperitoneal inoculation of tissue from a mesenteric lesion. One pig died twenty-three days after the injection, the other was moribund and so killed. Both

pigs showed similar lesions. The mesenteric lymph glands formed part of a mass which resembled closely the original mesenteric lesion observed in foxes. The liver contained one nodule about the size of a pea. The spleen was enlarged and pale. The thoracic cavity was full of a fibrinous exudate. Numerous minute nodules were forming on the diaphragmatic pleura. The lungs were congested but showed no visible lesions. The mediastinal glands were enlarged and yellowish in places. In subsequent transfers from guinea pig to guinea pig, animals have succumbed to infection in as short a period as fifteen days.

Rabbit.—This animal shows greater resistance to infection. Of two rabbits inoculated one died of acute peritonitis immediately following the infection. The other lived for fifty days, dying of typical miliary tuberculosis.

Fowl.—A white Leghorn rooster was given an intraperitoneal injection from a fox lesion. Eighty days later no lesions could be found on making a post-mortem examination.

Staining and Morphology.—Smears from guinea pig lesions show tremendous numbers of acid-fast organisms. In morphology they closely resemble the human type. Long slender rods, straight or slightly curved, and showing irregularities in staining, i.e., beaded forms.

Culture.—At the time of writing we have not been successful in cultivating the organism.

Question of Type.—This has not yet been determined. The lack of pathogenicity for birds would exclude its avian origin. In morphology it closely resembles the "human type," but in pathogenicity the bovine. There is absolutely no evidence of exposure to human tuberculosis. One would be inclined to suspect bovine tuberculosis, the infection occurring through the large quantities of raw meat consumed. In this connection it is interesting to note the case of a rancher who fed slaughter house offal occasionally, containing tuberculous meat with no apparent harm. The question of type will have to remain undetermined for the present.

ENCEPHALITIS IN SILVER BLACK FOXES

BY F. W. SCHOFIELD, D.V.Sc.

An accurate description of this disease has recently been made by Green and Shillinger.¹ There is no doubt in the mind of the writer that the disease is quite prevalent among the foxes in this Province. During recent years we have, on several occasions, encountered peculiar outbreaks of disease amongst foxes which we have been unable to diagnose. The disease would seem to be identical with that described as "Fox Encephalitis." The histories of several outbreaks have been drawn upon in preparing this report.

Symptoms.—These are frequently entirely lacking, the owner stating that the animal was in perfectly good condition prior to death. This characteristic suddenness of fatal attack causes the owner to believe that his animals have most likely been poisoned. Convulsions are the most constant symptom of the

disease. The attacks are sudden in onset, and of brief duration. The convulsions may follow each other with marked rapidity or occur at long intervals. When the convulsion is over the animal lies down quietly as if exhausted. In one outbreak it was noticed that the attacks occurred with greatest frequency about feeding time. This was undoubtedly due to the increased excitement which is evident at such times. An animal resting quietly may suddenly and from no apparent cause spring forward and dart around the cage, finally falling over in a convulsion. This aspect of the disease closely resembles running fits in dogs. The appetite may or may not be affected. An animal while eating may suffer from a convulsion and within a few minutes after this has passed away return to feeding. Paralysis is common, the posterior extremities usually being affected. A few cases show recovery for periods as long as a month or six weeks, when the convulsions recur and the cases terminate fatally.

Mortality.—The mortality is high, on one ranch 60 per cent. of the foxes dying, and on another 20 per cent.

Post-mortem.—Characteristic of the disease is the lack of any apparent pathological condition of sufficient consequence to cause death. The only constant lesion is petechial haemorrhage. These are almost always present in the thymus gland, the pancreas and the lungs, with occasional petechiae in the heart and other internal organs. In one case a well-marked haemorrhage was found in the medulla. Congestion of the brain and coverings has been observed.

Microscopic Examination.—Our findings agree with those of other investigators, that there is a definite peri-vascular infiltration of certain vessels in the medulla. We have not found such changes in either the cerebrum or cerebellum. This may be due to the limited number of our examinations. Engorgement of the vessels in the pia mater may occur. Nothing definite has been observed in other organs.

The symptoms of this disease of foxes reminds one somewhat of "fright disease" in dogs, while the pathological findings are not dissimilar to those of human sleeping sickness (encephalitis lethargica).

REFERENCE

¹R. G. Green & Shillinger—Journal of the A.V.M.A., Feb. 1929. Vol. 27, No. 3, pps. 277-282.

AN OUTBREAK OF LOBAR PNEUMONIA IN SILVER BLACK FOXES

Sporadic cases of pneumonia occur not infrequently among foxes but serious outbreaks of the disease are, in our experience, rare. It is rather surprising that the disease does not occur with greater frequency as damage and irritation to the lung tissue is common in foxes, the result of parasitic invasion. The healthy outdoor life of the fox undoubtedly explains its freedom from pulmonary disease.

History.—The outbreak under consideration occurred on a well-kept modern ranch where the foxes were in excellent condition. Young foxes, all under one year of age, were alone attacked, with the serious mortality of sixteen deaths among one hundred and seventy foxes. The older foxes were equally exposed with the young but entirely resisted the infection. The distribution of cases was rather interesting, the disease occurring in different parts of the ranch in widely

separated pens. Great precaution was taken by the attendants to prevent the disease from spreading throughout the ranch. Out of a total of sixteen cases six occurred in three pens, each pen containing two foxes. All of these cases terminated fatally. Of the remaining cases there was only one instance of foxes in adjacent pens becoming affected. The fact that sixteen days elapsed between the first and the last case would indicate that the disease was not highly contagious and that the infection in most cases was carried by the attendants.

Mortality.—The death rate was very high. Sixteen out of eighteen animals attacked succumbed to the disease. It is doubtful whether both of those which recovered were genuine cases of the disease.

Symptoms.—In most cases there was little evidence of disease prior to death. In several cases the animals would be well enough to eat their evening meal and yet be found almost moribund in the morning. The chief symptom was that of laboured respiration accompanied by a discharge of bloody froth from the nostrils. The animals showed some stupor and usually died quietly.

Gross Pathology.—The extreme engorgement of the lungs was the only important feature. This was characteristic of every case. Most of the lobes were solid—red hepatization—the remaining pulmonary tissue being acutely congested. A small quantity of bloody fluid was present in the thorax. The bronchii and trachea were filled with a bloody froth. Bronchial lymphatic glands were acutely inflamed. Bloody serum seeped from the cut surface of the solidified tissue. The condition was that of acute lobar pneumonia.

Microscopic Appearance.—This was quite typical of croupous or lobar pneumonia. In many areas the lung tissue was almost obliterated by haemorrhage. Everywhere the alveolar capillaries were greatly distended while the alveoli contained varying amounts of fibrin, usually mixed with numerous red blood cells. The cellular response was practically nil, a few leucocytes and detached alveolar cells alone being present. The picture was that of a per-acute inflammation.

Bacteriological Findings.—In all cases cultures upon blood agar gave an almost pure culture of a markedly haemolytic streptococcus. The organism was Gram positive and gave the following reactions in carbohydrate media. Fermentation of glucose and lactose. Maltose, mannite and saccharose were negative. On agar the growth is delicate. In texture smooth and not brittle except in old cultures. It is a short chain streptococcus.

Immunity.—It is of interest to note that the young foxes—pups—were alone attacked. Although there were on the ranch many mature animals not one case occurred among them. As all were equally exposed and receiving similar treatment as to food and shelter it would appear that age was an important factor in immunity.

Immunization.—An autogenous bacterin was prepared and administered to one hundred of the fox pups. The remaining fifty were inoculated with a stock product. Following the inoculation no further cases developed amongst those receiving the autogenous bacterin, while two cases occurred amongst the fifty foxes treated with the stock bacterin. The apparently beneficial effect of the immunization may be really due to the fact that the disease had about run its course before the treatment was administered.

ANEMIA IN SUCKLING PIGS

BY F. W. SCHOFIELD, D.V.Sc.

During the last ten years the mortality among young pigs raised at the College Farm has been a source of much anxiety and the subject of considerable investigation. The losses have occurred almost exclusively among little pigs prior to weaning and in winter litters only. Such losses are not confined to the local piggery, but are being reported from all parts of the Province. Hygienic conditions seem to be of little consequence in influencing the death rate of the disease in question. Numerous cases have occurred in modern piggeries while pigs raised under what are considered unfavourable conditions show no increased susceptibility. Some observers state that the disease was unknown before the establishment of large piggeries.

During the winter of 1926-27, due to the unusually heavy losses amongst the young pigs at the Agricultural College, an investigation was made to discover the cause of such heavy mortality. Numerous post-mortem examinations were made and bacteriological cultures from infected organs and exudates. The results were not satisfactory. No single organism was found that could be constantly related to the disease. About this time our attention was directed to articles on "Iron Deficiency in Pigs," by J. P. McGowan and A. Crichton.¹ In brief, these authors had detected and described a condition affecting suckling pigs which was in all important aspects similar to the disease under consideration. Of chief significance was their discovery that anemia or an iron deficiency was the root of the trouble, and that the pneumonia, pericarditis, and peritonitis, which was so frequently present, were infections consequent to the anemia. With this finding we are in complete accord. But the preventive and remedial measure so successful in their hands, i.e., the addition of ferric oxide to the food, has in our hands been entirely disappointing. Later appeared the excellent work of L. P. Doyle, F. P. Matthews and R. A. Whiting,² in which they corroborated the findings of McGowan as to the supreme importance of the anemic state but, like ourselves, they failed to find a remedy in feeding iron. These authors in their most recent contribution, "The Effect of Ultra-violet Radiation on Blood Formation in Young Pigs,"³ find that treatment by means of the mercury-vapor-quartz lamp did not increase the red cell or hemaglobin content of the blood of young pigs.

With these brief introductory remarks we will pass on to a description of the disease and a consideration of the data, experimental and other, that we have gathered up to date.

Symptoms.—These are few but definite. In all cases there is a blanching of the conjunctiva. The ears, when seen against the sunlight, are very pale. The pigs are usually in good flesh, and to the casual observer would appear to be in fine physical condition. There is, however, an excess of fat formation, which is very evident in the inferior maxillary region. There is a pronounced dislike to exercise and exhaustion follows upon the least exertion. Thumps—spasm of the diaphragm—may be present. Pigs frequently die suddenly while in this apparently good condition, or they may begin to lose flesh as they grow older and become runts. Diarrhea and broncho-pneumonia, which are very frequently associated with the condition, are infections, the result of anemia.

It is important to note that these symptoms rarely appear before the pigs are three weeks old, or after the pigs have reached the age of six weeks.

Macroscopic Appearance.—Upon opening the carcass one is struck by the pallor of the tissues and the thin, pale blood. The liver is usually affected in a very characteristic way in that it is uniformly speckled with innumerable very small white dots. These represent intra-lobular degeneration. The abdominal cavity frequently contains much fibrinous exudate. The kidneys are pale. The heart is almost invariably dilated and the musculature pale. Oedema of the lungs was very common. Congestion and pneumonia with hydro-thorax was frequent. Fibrinous pericarditis was observed in many cases. Mild inflammation of the body lymph glands was of frequent occurrence, the cervical being chiefly involved.

Microscopic Appearance.—Pronounced and generalized degenerative fatty infiltration of the liver was the most constant pathological change. Dilated capillaries flanked by damaged and atrophied hepatic cells gave evidence of passive congestion consequent upon the weak heart. We have observed in some cases the groups of cells designated by Doyle as "erythroblastic cells" forming "active hematopietic centres" and believe this is the correct interpretation for such. Marked cell degeneration with some fatty infiltration is found in both the renal epithelium and the cardiac musculature.

The Blood Picture.—Blood films stained by the usual method showed an extraordinary number of badly damaged erythrocytes. They had the appearance of worn-out and effete cells kept in circulation to do duty as long as possible. Poikilocytosis and polycromasia with cells staining very poorly due to the limited hemoglobin was characteristic of the majority of the cells. Nucleated red blood cells were only occasionally seen. Microcytes were very numerous.

Erythrocyte Count.—It was discovered that the relationship between the degree of anemia as indicated by the quantity of hemoglobin and the number of red blood cells was far from constant. One pig with only 10 per cent. hemoglobin gave a cell count of four millions per cu. mm. while other pigs with 25 per cent. hemoglobin gave counts of as low as three and a half and four millions per cu. mm. The following table gives the averages taken from forty-five anemic pigs.

Hemoglobin Per cent.	Number of R.B.C. Per cu. mm.
10%	3.3
20%	4.1
25%	4.7
30%	5.1
40%	6.3
70%+	7.4

This well illustrates the very low colour index consequent upon the paucity of hemoglobin in the cells.

HEMAGLOBIN ESTIMATIONS IN ANEMIA

It was rather surprising to discover the marked variation in the hemoglobin content of the blood which exists in different members of the same litter at time of birth. Apparently even during fetal life in some pigs, iron metabolism—as far as the manufacture of hemoglobin is concerned—is more perfectly carried

on than in others. There would seem to be little relationship between body weight and hemaglobin content at time of birth, although this is apparent later.

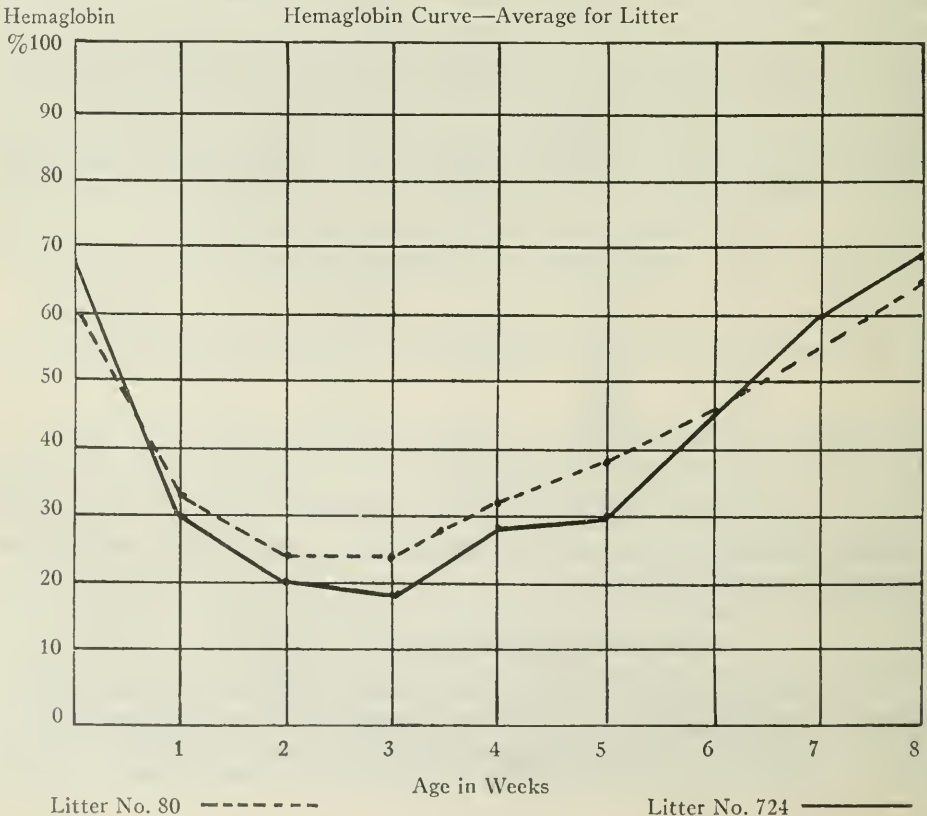
Hemaglobin Variation among Litter-mates Estimated at Time of Birth		
No.	Hemaglobin Per cent.	Weight of Pig
691	50	3.2 lbs.
692	43	3.6 "
693	30	3.2 "
694	55	3.4 "
695	55	3.8 "
696	65	2.6 "
697	50	2.14 "
698	89	2.5 "

(Dare's Hemaglobinometer used in all estimations.)

A high hemaglobin reading at time of birth has, in the majority of cases, a distinct advantage in the long run. As the anemic state progresses the hemaglobin of all the pigs in the litter reaches a very low level, and the favourable differences noted are frequently related to the pigs which had a good start.

The curves shown in the following table bring out clearly the very rapid decrease in hemaglobin during the first four weeks of life, and also the very puzzling spontaneous recovery which occurs in the majority of pigs in practically every litter.

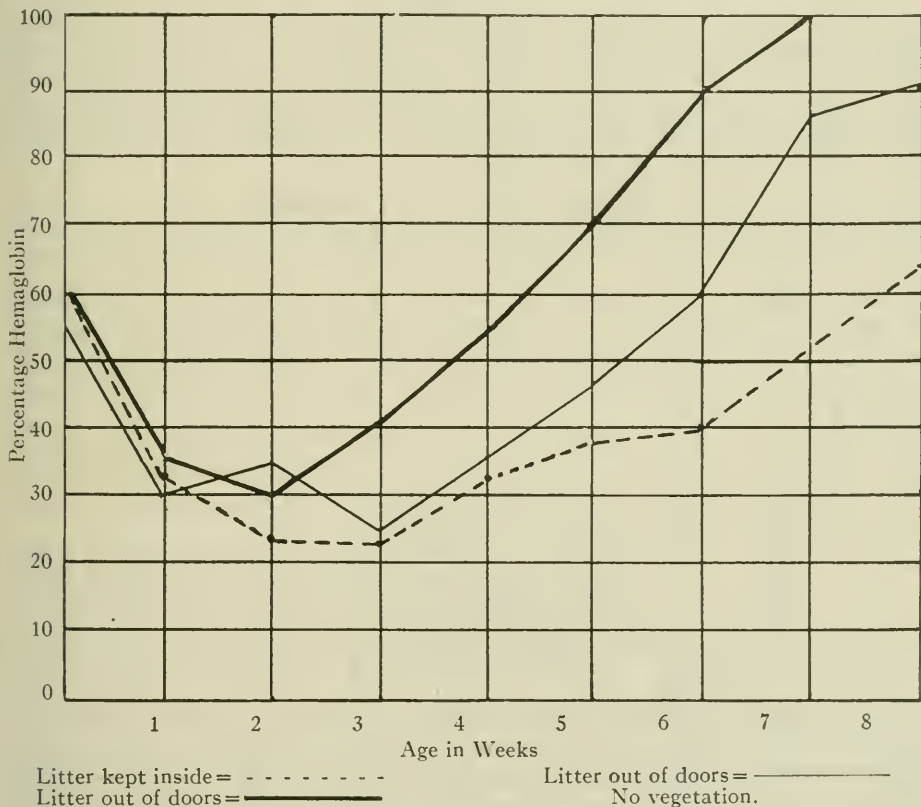
Hemaglobin Curve—Average for Litter



The decline in hemaglobin continues until the third week. The decrease in the first week of life being most acute, frequently being as much as 50 per cent. The pigs, it must be remembered, are growing rapidly with marked increase in blood volume, yet not at a rate sufficient to account for such a severe drop in hemaglobin. It would certainly appear that hematopoietic function is at a standstill. The worn-out appearance of the erythrocytes is most suggestive of such a catastrophe. Old cells are being retained in the circulation even though at the point of disintegration, while the addition of new cells is extremely limited. The question of spontaneous recovery which commences usually between the third and fourth weeks of life is indeed baffling. The obvious answer, that recovery is due to the food which pigs of such age are sure to pick up around the sty, would seem to be incorrect. Observant stockmen state that the marked lassitude of the anemic pigs results in absolutely no desire to forage and the mother's milk is the only food consumed. On this point I am at present not satisfied.

There is, of course, a marked difference in individual pigs, both in hemaglobin decline and increase. The more sudden ascent in the curve for litter No. 724 is due to the death of two pigs at the sixth week, both of which were very low in hemaglobin.

Effect of Outdoor Environment



EXPERIMENT TO DETERMINE THE EFFECT OF SUNSHINE AND OUTDOOR CONDITIONS UPON THE HEMAGLOBIN CONTENT OF THE BLOOD

Those who have studied this condition of anemia are agreed as to the beneficial effect of outdoor life. The helpful factors have as yet not been accur-

ately determined. In this experiment three sows which farrowed at about the same time were kept, one with her litter indoors, one allowed the freedom of an outside yard whenever the weather was favourable. In the yard, grass and various weeds were growing. The remaining sow with her litter were allowed access to an adjoining outside pen. The floor of the pen was concrete, no vegetation was available.

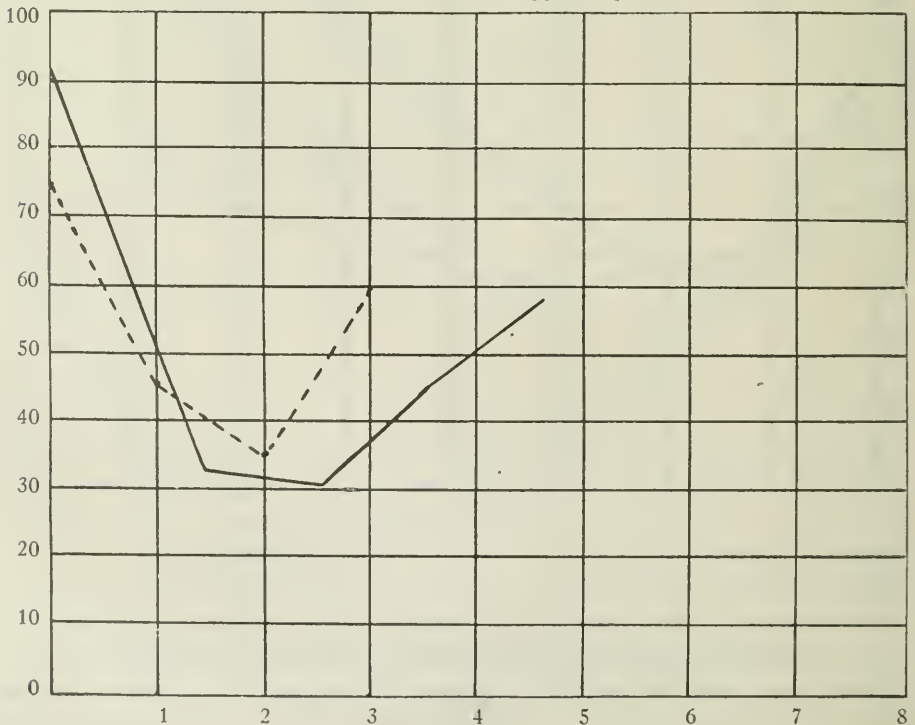
On studying the chart we notice that the best litter was the one running in the yard. Here the hemaglobin never fell quite as low as in the other two, but most marked is the rapid rise to a high percentage. The litter under close confinement gives the poorest showing. Exposure to sunshine and fresh air apparently had a slightly beneficial effect.

EXPERIMENT TO DETERMINE THE EFFECT ON THE HEMAGLOBIN OF THE OFFSPRING OF FEEDING COPPER DURING THE PERIOD OF PREGNANCY

The valuable work of Hart⁴ and his associates on nutritional anaemia in suckling rats seemed to us to have real significance for the closely related condition of anemia in young pigs. Their discovery of the unique importance of copper in the formation of hemaglobin suggested the following experiments:

(a) Two sows were used in this experiment. One was given in addition to the regular ration one pound of fresh spinach and about sixty grains of copper sulphate daily for a period of six weeks before farrowing. This sow was confined to her pen during the entire period of the experiment. In the case of the other sow, no spinach was allowed, but free access to an outside brick-floored pen. In all other respects the treatment of both sows was identical. The results of the experiment are here shown graphically.

Experiment "A" with Copper Sulphate

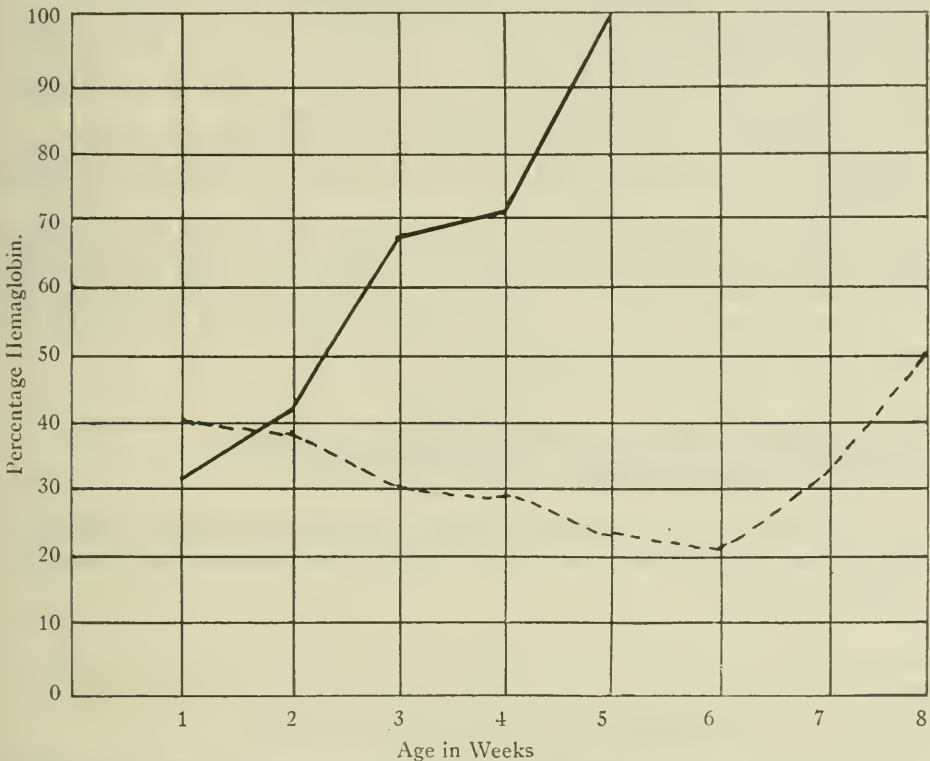


Sow indoors. Spinach and Cu SO⁴ added to ration. = —————
 Sow outside. Cu SO⁴, but no spinach = - - - - -

It will be noticed that the addition of copper sulphate to the ration failed to prevent the rapid decline in hemaglobin which is so typical of the disease. The sudden recovery of the litter indicated by the dotted line was due to the pigs being turned out to grass at the end of the second week. As the weather was warm, and the pigs were of valuable stock, it was thought advisable to save the whole litter if possible.

(b) Two sows with their litters were employed. In both cases applications of a sticky iron-copper-glucose mixture were made to the teats of the sows before the pigs were allowed to nurse. The mixture was applied twice daily. One sow with her litter was allowed the freedom of the pig run, the other was confined to her pen.

Experiment "B" with Copper-Iron-Sunshine



Sow and Litter outside. Iron-Copper-Glucose = —————
 Sow kept inside. Iron-Copper-Glucose = - - - - -
 (The composition of the mixture = Copper sulphate, grs. 10.
 Ferric chloride, grs. 240.
 Sodium hydroxide, grs. 100.
 Glucose, Q.S.)

These curves are in striking contrast. We have no other record of a litter showing a hemaglobin rise from the first week which was maintained throughout. It would appear that the iron and copper was an advantage to pigs living outside. The indoor litter suffered from severe anemia, two of the five pigs dying before the conclusion of the experiment.

In a few cases anemic pigs were fed individually, some with liver extract and some with an aqueous extract of spinach. Daily feedings were made but without any appreciable effect, the control pigs making equally good progress.

The grain ration of all pigs used in these experiments was one which has been used for some years at the College. The composition is as follows: finely ground oats, 2 lbs.; shorts, 1 lb.; skim milk, 1 lb. to every pound of grain. A mineral mixture was kept before the sows constantly. It contained charcoal, 4 bushels; sodium chloride, 8 lbs.; air-slaked lime, 8 lbs.; sulphur, 1 lb.; bonemeal, 5 lbs.; ferric oxide, $\frac{1}{2}$ lb.

Conclusions

1. That anemia frequently develops in suckling pigs during the first two weeks of life.

2. That the feeding of iron, and iron and copper to the mother during pregnancy failed to prevent the occurrence of the disease in the offspring.

3. That spontaneous recovery occurs in a large number of cases providing the animals survive to the sixth week.

4. That the acute infections with such high mortality which occur frequently among young pigs are consequent upon the anemic condition.

5. The disease can be prevented by an environment which includes fresh air, sunshine, soil and green feed. We have found no substitute for these conditions.

6. That as an outdoor environment is impossible during the winter months a further study of the problem is required to determine the exact nature of the factors in such environment which prevent the occurrence of anemia in suckling pigs. Knowing these factors it may be possible to prevent the development of anemia even under the adverse conditions of indoor life.

BIBLIOGRAPHY

1. J. P. McGowan and A. Crichton, *Biochemical Journal*, 1923. Vol. 17, page 204.
2. Doyle-Matthews-Whiting, *Journal. A.V.M.A.*, January, 1928, page 491.
3. *American Journal of Physiology*. Vol. 88, No. 4, May, 1929.
4. *Journal of Biological Chemistry*. Vol. 77, page 794, 1928.

(The work here recorded was done in collaboration with R. G. Knox, B.S.A., Associate Professor of Animal Husbandry, Ontario Agricultural College, Guelph.)

DEPARTMENT OF BACTERIOLOGY

During the year ending October 31st, 1929, the work carried out may be summarized under the following headings:

Teaching.—This was the same as during the preceding year. Lectures on bacteriology were given to the second, third and fourth year classes, and laboratory work in bacteriology to the third and fourth years. A course of lectures and practical work in milk hygiene and poultry diseases was also given to the fourth year class. Instruction and demonstrations were given at the summer conference of veterinarians.

Preparation of Biological Products.—Two hundred and sixty-eight thousand test doses of *S. pullora* antigen and positive and negative control sera were distributed to veterinarians for the agglutination test for *S. pullora* infection. *B. abortus* antigen was also sent out for use by veterinary surgeons. Autogenous bacterins were prepared for use at the College and by practitioners.

Research and Investigation.—Experimental work was carried on in connection with pullorum disease, infectious abortion and *P. avicida* infections and disinfection of incubators with formaldehyde. In addition investigations were made into outbreaks of disease where necessary. Reports, where the work is sufficiently advanced, are submitted in the accompanying appendices.

Routine Examinations of Specimens.—This consisted of the routine examination of samples of fowl and cattle blood, and the bacteriological, or such other examination as was required, of other specimens. The routine testing of blood samples was carried out by Dr. J. S. Glover and Miss A. Le Grand. The only fowl bloods examined were from the Poultry Husbandry Department of the O.A.C., and breeding stations under the supervision of the Department of Agriculture of Ontario. Testing for others was carried out as formerly by certain practitioners to whom we supplied the necessary antigen and control sera for this work. Most of the antigen was prepared by Mr. S. Holloway of the senior year.

During the summer Dr. R. Gwatkin was loaned to the Committee on Contagious Abortion of the Ontario Research Foundation to act as Secretary, and on September 1st was granted leave of absence for a year to continue in this capacity and carry on laboratory work for the committee in Toronto. Dr. Glover has conducted the routine examination of specimens and carried on experimental work as time permitted. There was a marked increase for the year in the number of poultry carcasses examined.

BLOOD SERUM EXAMINATIONS

Animal	Disease	Number of Samples Received	Positive	Suspicious	Negative	Unfit for Testing
Fowl.....	<i>S. pullora</i> infection...	30,472	2,184	35	27,767	486
Cattle.....	Infectious abortion...	3,265	1,043	505	1,657	60

SYNOPSIS OF BACTERIOLOGICAL AND OTHER EXAMINATIONS COMPRISING 2,130 SPECIMENS

Condition or Disease	Horses	Cattle	Sheep	Swine	Poultry	Miscellaneous
Anthrax.....		2				Milk..... 27
Abortion.....		10				Water..... 3
Abscess and other infections.....	3	12	7	4	49	Eggs..... 14
Blackleg.....		5				Feces..... 2
Botulism.....	1					Canary..... 1
Hemorrhagic septicemia.....		7	8	1		Parrot..... 1
Mastitis.....		10				Blood..... 2
Malignant oedema.....		2				Dog..... 1
Johne's disease.....		1				Rabbits:
Adult pullorum infection.....					13	Septicemia.. 6
Pullorum disease in chicks.....					594	Coccidiosis.. 21
Other chick diseases.....					42	
Bumblefoot.....					7	
Avian diphtheria.....					33	
Roup and colds.....					40	
Nutritional conditions.....					124	
Fowl cholera.....					57	
Coccidiosis.....					250	

SYNOPSIS OF BACTERIOLOGICAL AND OTHER EXAMINATIONS COMPRISING 2,130 SPECIMENS
 —Continued

Condition or Disease	Horses	Cattle	Sheep	Swine	Poultry	Miscellaneous
Transient paralysis.....					3	
Leukaemia.....					22	
Peritonitis.....					19	
Tumours.....					47	
Tuberculosis.....					50	
Cystic oviduct.....					3	
Ruptured oviduct.....					12	
Infection of oviduct.....					3	
Enterohepatitis (chicks and turkeys).....					47	
Prolapse.....					3	
Egg-bound and yolk concretions.....					3	
Infectious tracheitis.....					5	
Visceral gout.....					8	
Impaction of crop.....					8	
Oedema of wattles.....					2	
Poisoning.....					9	
Tapeworms.....					235	
Roundworms.....					170	
Roundworms and tapeworms.....					68	
Putrid and not diagnosed.....	2	5	1		45	
Totals.....	6	54	16	5	1,971	78

 THE DOUBLE INTRADERMAL TEST FOR THE DIAGNOSIS
 OF BOVINE INFECTIOUS ABORTION

By RONALD GWATKIN, B.V.Sc., D.V.Sc.,
 and R. A. McINTOSH, M.D.V., B.V.Sc.

Holtum¹ in 1928 published an article dealing with the double intradermal test for the diagnosis of infectious abortion in cattle, in which he claimed superiority for this method over the agglutination test. McFadyean² criticized Holtum's condemnation of the agglutination test and questioned the results obtained by the latter. Intradermal tests for *B. abortus* infection in cattle and guinea pigs had previously been tried by McFadyean and Stockman,³ Meyer and Hardenbergh,⁴ Reichel and Harkins,⁵ Fleischner and Meyer,⁶ Stafseth,⁷ and Gwatkin.⁸

Preparation of Abortins. Four preparations of abortin were made. These were as follow.

A. Holtum's abortin. This is similar to that employed by Reichel and Harkins, Stafseth, and Gwatkin. One strain of *B. abortus* was grown on flat flasks of beef infusion agar, about pH 7.8, which were incubated at 37° C for 72 hours and then held in the dark at room temperature for 12 days. The growth was washed off with normal salt solution and heated at 65° C for 30 minutes. Cultural tests for sterility were made, the suspension reduced to a density that gave a measurement of 6 mm by Gates' method of standardization, and preserved by the addition of 0.5% phenol.

B. Heated filtrate. *B. abortus* was grown for two weeks in beef extract broth, about pH 7.8, at 37° C. It was heated for 1 hour at 60° C and filtered through

paper and a Berkefeld candle. Sterility was tested by cultures on solid medium and incubation of a portion of the filtrate. It was preserved by the addition of 0.5% phenol.

C. *Unheated filtrate.* This was prepared in the same manner as B but the suspension was not heated.

D. *Extract. B. abortus* was grown for two weeks at 37° C on liver infusion agar, about pH 6.8, in flat flasks. Thirty c. c. of distilled water were added to each bottle and allowed to stand for four weeks in the dark at room temperature. The resultant fluid was rather thick and bouillon-like. It was filtered through paper and a Berkefeld candle, tested for sterility and preserved with 0.5% phenol.

The same strain of *B. abortus* was employed in each case.

Agglutination Antigen. *B. abortus* was grown for four days at 37° C on liver infusion agar, pH 6.8. It was washed off with 0.85% salt solution containing 0.5% phenol, filtered through wool and reduced to a turbidity equal to tube No. 1 of McFarland's nephelometer.

The writers employed Holtum's abortin, and also the other preparations of abortin by the double and single intradermal methods, on a dozen cows with the intention of giving the test an extensive trial if it proved satisfactory.

Experiment 1.

Twelve cows in an infected dairy herd were bled and the sera were set up in dilutions of from 1-25 to 1-1000. At the same time skin measurements were made and 0.2 c. c. abortin was injected in the shaven skin of the neck. A second injection was made 48 hours later in the same place, with the exception of those animals that showed a diagnostic swelling at that time. Readings were made 24 hours later. A single injection was also made in the caudal fold. Readings are shown in table 1.

TABLE 1

No. of cow	Agglutination Test 48 Hrs.						Double Intradermal Test Readings in Millimetres			Diagnosis	Caudal fold 48 hrs.
	1-25	1-50	1-100	1-250	1-500	1-1000	Normal	48 hrs.	72 hrs.		
1	+	+	+	-	-	-	6	30	*30	Positive	Positive
2	+	+	+	+	+	-	8	13	18	"	"
3	-	-	-	-	-	-	7	12	15	"	"
4	+	P	-	-	-	-	9	20	*50	"	"
5	-	-	-	-	-	-	5	9	10	"	"
6	-	-	-	-	-	-	6	14	30	"	"
7	+	+	+	P	-	-	5	17	*32	"	"
8	+	+	-	-	-	-	8	15	27	"	"
9	+	+	+	+	+	+	7	26	*42	"	"
10	+	+	+	+	+	-	6	12	18	"	"
11	-	-	-	-	-	-	6	14	21	"	"
12	-	-	-	-	-	-	5	10	17	"	"
H. steer	-	-	-	-	-	-	9	13	12	Negative	Negative
S. steer	-	-	-	-	-	-	5	8	9	"	"

+ = Complete agglutination.
P = Partial agglutination.

*Not reinjected at 48 hours.
- = No agglutination.

Seven animals were positive or suspicious by the agglutination test and five were negative. All were positive by the double abortin test, based on the standard of measurements suggested by Holtum, namely, measurements equal to or exceeding twice the initial thickness of the dermal fold. The increase in the dermal fold of the two steers was less than double the original measurement. All were positive by the caudal fold injection, based on a pea-sized swelling as a positive reaction. Strippings from each cow were collected and two guinea pigs injected with each sample of milk. One received 10 c.c. of whole milk and the other the sediment of 10 c.c. of milk by intra-abdominal injection. By agglutination tests on the blood of these guinea pigs and recovery of the organism *B. abortus* was shown to be present in the milk of Nos. 2, 9 and 10. The organism was not recovered from the other guinea pigs, nor did they develop agglutinins against *B. abortus*. It is interesting to note that the only cows in this group with a high agglutinin titre had infected udders, as has been suggested by Smillie⁹ and others. Holtum was able to show that several animals that were negative to the agglutination test and positive to the abortin test were infected, as shown by guinea pig inoculations of the milk. There was no evidence of this in these cases.

Experiment 2.

Three months later another agglutination test was carried out on the same cows and on two steers which had been isolated for a period of a year. Abortins B, C and D were injected in the same dosage and by the same method as previously employed with A. Abortins B and C only were used on the steers. The results are given in table 2.

TABLE 2

No. of cows	Agglutination Test						Abortin Tests									Diagnosis		
							Skin Readings											
							48 hrs.			72 hrs.								
	1-25	1-50	1-100	1-250	1-500	1-1000	Normal	B	C	D	B	C	D	B	C	D		
1	+	+	+	—	—	—	7	9	9	9	9	9	11	Neg.	Neg.	Neg.		
2	+	+	+	+	P	P	8	15	11	10	*13	13	15	Pos.	Pos.	Pos.		
3	+	P	—	—	—	—	6	8	9	7	8	10	8	Neg.	Neg.	Neg.		
4	+	+	P	—	—	—	9	9	10	8	8	15	10	"	Pos.	"		
5	+	—	—	—	—	—	5	8	7	7	8	8	8	"	Neg.	"		
6	+	+	+	—	—	—	7	7	8	10	9	10	10	"	"	"		
7	+	+	+	—	—	—	5	6	6	6	7	9	9	"	"	"		
8	+	+	+	—	—	—	7	13	15	8	*20	*22	14	Pos.	Pos.	Pos.		
9	+	+	+	—	—	—	6	9	9	7	12	14	12	"	"	"		
10	+	+	+	+	—	—	5	5	6	6	7	7	8	Neg.	Neg.	Neg.		
11	+	—	—	—	—	—	6	8	8	8	9	15	12	"	Pos.	Pos.		
12	+	+	—	—	—	—	6	6	7	7	7	8	10	"	Neg.	Neg.		
H. steer	—	—	—	—	—	—	10	10	11	...	11	10	...	"	"	.....	
S. steer	—	—	—	—	—	—	7	6	6	...	7	6	...	"	"	.....	

+ = Complete agglutination.

P = Partial agglutination.

*Not reinjected at 48 hours.

— = No agglutination.

Of the five previously negative animals two showed complete agglutination in 1-25, one complete in 1-25 and partial in 1-50, one complete in 1-25 and 1-50 and one complete in 1-25, 1-50 and 1-100. The two steers showed only a slight swelling, the largest being an increase of 1 mm. Accepting an increase of 4 mm. as positive only three animals gave a positive reaction with abortin B. Five animals gave a positive reaction with abortin C and four with abortin D. As less than 4 mm. increase in the dermal field could hardly be accepted as a satisfactory diagnostic swelling and as cow No. 10, known to be infected, showed only an increase of 3 mm. or less, these abortins were considered to be incapable of producing a satisfactory reaction.

Experiment 3.

The development of agglutinins in the five previously negative animals may have been due to infection, as they were not isolated, or to the injection of abortin A. Holtum states that this abortin did not stimulate agglutinin production. To check this four guinea pigs were tested and all were negative. Nos. 1 and 2 were given one cattle dose (0.2 c.c.) of abortin A and Nos. 3 and 4 the same dose of abortin C.

Table 3 gives the titre of the serum of these pigs 10 days after the injection.

TABLE 3

No.	Agglutination Results, 48 Hours						
	1-10	1-25	1-50	1-100	1-250	1-500	1-1000
1.....	+	+	+	+	P	P	-
2.....	P	P	P	+	+	P	-
3.....	+	+	+	+	-	-	-
4.....	-	-	-	-	-	-	-

+ = Complete Agglutination.
- = No Agglutination.

P = Partial Agglutination.

Both guinea pigs receiving abortin A gave a well marked agglutination reaction. One of the pigs receiving the filtrate showed agglutination up to 1-100 and the other remained negative. It is obvious, therefore, that the first injection of abortin A may have been the cause of the agglutination reaction in the previously negative animals on the second test, and some support is lent to this by the low titre of these animals. Under the conditions of exposure, however, this point could not be decided. Owing to the fact that it was deemed inadvisable to interfere with the natural agglutination reactions in this herd the experiment has been temporarily discontinued.

Discussion. A comparison was made on twelve cows and two steers of the agglutination test and Holtum's double intradermal test for the diagnosis of infectious abortion. This was checked by guinea pig inoculation of samples of milk and milk sediment. Seven animals were positive or suspicious by the agglutination test and five were negative. All were positive by the abortin test.

The two steers were negative by both tests. The milk of three cows was shown to be infected. These three animals were the only ones giving a titre of 1-500 or over. An agglutination test three months after the injection of abortin showed that the five previously negative animals had titres varying from 1-25 to 1-100. Two rabbits inoculated with the cattle dose of this abortin intradermally developed titres on the tenth day of 1-100 and 1-200 respectively.

The swellings in the steers did not reach twice the measurement of the original dermal fold while those in the cows reached or exceeded it. However, in one steer and in one cow there was only a difference of 1 mm. Had it been possible to isolate the five cows that were negative to the agglutination test and positive to the abortin test it might have been possible to determine the presence or absence of infection at time of parturition by inoculation of exudate and fetal membranes into guinea pigs. This was not possible and the subsequent development of agglutinins could not be considered as due to infection in view of the fact that this abortin produced agglutinins in rabbits, therefore there was no way of determining whether the agglutination test or the abortin test was correct, as in the three cases with infected udders both tests were positive. The writers are satisfied, however, that it is extremely unlikely that five out of twelve cows would give a negative agglutination reaction and yet be found to be infected.

Three other preparations of abortin, namely, heated and unheated filtrate and an aqueous extract of agar cultures were not of value.

Acknowledgements. The writers are indebted to J. S. Glover, B.V.Sc. and S. H. Holloway, for assistance with this work.

REFERENCES

- ¹Holtum, A. W., Jour. Comp. Path. and Ther. 41, parts 1 and 2, March and June, 1928.
- ²McFadyean, J., Jour. Comp. Path. and Ther. 41, part 4, December, 1928.
- ³McFadyean, J., and Stockman, Report Dept. Comm. on Epizootic Abortion, 1909.
- ⁴Meyer, K. F., and Hardenbergh, J. B., Jour. Inf. Dis. 13, No. 3, November, 1913.
- ⁵Reichel, J., and Harkins, M. J., Jour. A.V.M.A., N.S. 3, No. 7, 1913.
- ⁶Fleischner, E. C., and Meyer, K. F., Am. Jour. Dis. of Children, 16, No. 4, 1918.
- ⁷Stafseth, H. J., Mich. Agr. Coll. Exp. Stn. Tech. Bul. 49, November, 1920.
- ⁸Gwatkin, R., Report Ont. Vet. College for 1923.
- ⁹Smillie, W. E., Little, R. B., and Florence, L., Jour. Exp. Med., 30, No. 4, October, 1919.

FURTHER NOTES ON *PASTEURELLA AVICIDA*

RONALD GWATKIN, D.V.Sc.
and J. S. GLOVER, B.V.Sc.

Gwatkin¹ in 1928 published some observations on *P. avicida* in connection with subacute infections in fowl. The writers carried on further studies with this organism as opportunity offered during the past year. Much work has been done in connection with the Pasteurella group but a vast field remains for investigation, especially in connection with the infection in fowl.

Fermentation Reactions. In the paper to which reference has been made four out of ten strains of *P. avicida* isolated from cases of roup showed variations in their carbohydrate reactions. Differences were also encountered in six of twenty-eight strains examined this year. The remainder coincided with those described by Fitch and Nelson². Cultures that varied from the normal were checked for purity and compared with controls to make certain that there had been no error

in connection with the media employed. Ten per cent. solutions of the carbohydrates were autoclaved in distilled water and added to extract broth with a reaction of pH 7.8 to give a one per cent. solution. The tubes were incubated four days to ensure sterility before they were used. The following table gives the source of the strains examined and their fermentation reactions.

No.	Source	Carbohydrates					
		Lactose	Maltose	Dextrose	Mannite	Saccharose	Salicin
4731	Wattle of cockerel.....	-	-	+	+	+	-
T2742	Brain of fowl.....	-	-	+	+	+	-
T12120	" ".....	-	-	+	+	+	-
T1523	" ".....	-	-	+	+	+	-
S797	" ".....	-	-	+	+	+	-
A12199	" ".....	-	-	+	+	+	-
S5459	Turkey (cholera).....	-	-	+	+	+	-
A12189	Brain of fowl.....	-	-	+	+	+	-
Fowl cholera	Old culture.....	-	-	+	+	+	-
4714	Acute fowl cholera.....	-	-	+	+	+	-
4765	" ".....	-	-	+	+	+	-
4771	Roup in wormy hen.....	-	-	+	+	+	-
4839	Acute fowl cholera.....	-	-	+	+	+	-
4845	" ".....	-	-	+	+	+	-
4854	Brain of fowl.....	-	-	+	+	+	-
4854 A	Nasal passages of same bird.....	-	-	+	-	+	-
4889	Roupy eye, fowl.....	-	+	+	-	+	-
4896	Fowl cholera.....	-	+	+	-	+	-
4912 A	Roupy eye, fowl.....	-	-	+	+	+	-
4912 B	" ".....	-	+	+	-	+	-
4929	Turkey (cholera).....	-	-	+	+	+	-
4934	" ".....	-	-	+	+	+	-
4951	Ovary of fowl.....	-	-	+	+	+	-
5064	Acute fowl cholera.....	-	+	+	+	+	-
5384	" ".....	-	-	+	+	+	-
5405	" ".....	+	+	+	+	+	-
D	Roupy eye in hen.....	-	-	+	-	+	-
5585	" ".....	-	+	+	-	+	-

+ = Acid.

- = No acid.

Six strains produced acid in maltose and one in lactose. Six did not produce acid in mannite but all did in saccharose. While it may be that the splitting of maltose and lactose is due to heating these substances, the fact remains that some strains act in this manner on media so prepared while others do not. A strain from a typical case of fowl cholera produced acid in lactose and maltose as well as dextrose, mannite and saccharose.

Search for P. avicida on the nasal mucosae of birds free from catarrhal symptoms. In some earlier work Gwatkin³ reported the finding of strains of *P. avicida* in two out of six apparently normal birds. These strains conformed to the usual sugar reactions but were not tested for pathogenicity. This year a bacteriological examination was made of the nasal passages of sixty-one birds that were free from nasal catarrh but were killed for examination for other conditions. All cultures resembling *P. avicida* were planted in lactose, dextrose, maltose, mannite, saccharose and salicin and were tested for pathogenicity. In addition to a cultural examination an emulsion of the nasal material was injected into rabbits in many instances. Following are the details of the cases examined:

No. 4782. A healthy pullet. An avicida-like rod was isolated but did not split any of the carbohydrates employed.

Nos. 4789a and b. Two hens affected with tuberculosis. Nothing resembling *P. avicida* was encountered.

No. 4790. A normal hen. A culture resembling *P. avicida* was isolated. It produced acid in dextrose and saccharose only. One slant of a twenty-four hour culture was not harmful to young rabbits by intra-abdominal injection.

No. 4854. The mate of a bird that died of a brain infection in which *P. avicida* had been found in profusion in the nasal discharge. This bird appeared normal and *P. avicida* was not demonstrated in the nasal passages by culture or animal inoculation.

No. 4856. This bird had a large clot of blood in the subcutaneous tissue of the back of the head and neck. It was otherwise normal. An organism somewhat resembling *P. avicida* was isolated from the nasal passages. It split saccharose only and was not pathogenic for rabbits on intra-abdominal injection in large doses.

No. 4882. A hen infested with tapeworms. Cultures and inoculation of rabbits showed no evidence of *P. avicida*.

Nos. 5121 a and b. Two white leghorn pullets infested with tapeworms. There was no evidence of *P. avicida* but *S. pullorum* was isolated from b.

No. 43790. A healthy white leghorn female. No evidence of *P. avicida* on culture or by animal inoculation.

No. 43799. A healthy white leghorn pullet. Negative for *P. avicida* by culture and animal inoculation.

No. T2511. A heavily parasitized cockerel. No evidence of *P. avicida* by cultural methods and animal inoculation.

No. 43796. A healthy white leghorn hen. A small gram negative rod was observed. Material from the nasal swab proved fatal for a rabbit and an organism was recovered in pure culture which was shown to be *S. pullorum* by sugar reactions and agglutination. An organism, possibly *Staph. cremoris viscosi*, was also isolated from this bird and produced ropiness in milk cultures.

No. 5490. Three chicken affected with coccidiosis. Nothing resembling *P. avicida* was encountered by cultural methods.

No. 5495. Two hens infested with roundworms and tapeworms. No evidence of *P. avicida*.

No. 5542. A hen infested with tapeworms. Nothing resembling *P. avicida* was observed by cultural methods.

No. 5543. A pullet heavily infested with roundworms and tapeworms. The only gram negative rod encountered was shown to be a member of the colon group.

No. 5549. A heavily parasitized pullet that was also affected with tuberculosis. No evidence of *P. avicida*.

No. 5493. Six chicken affected with roundworms and tapeworms. No evidence of *P. avicida*.

Nos. 5428-29-37-38-45. A group of nine young birds infested with worms. From various parts of the Province. No evidence of *P. avicida*.

No. 5544. A hen affected with leukemia. No bacteria from culture of liver and spleen. A few colonies resembling *P. avicida*. Acid was produced in dextrose, mannite and saccharose, but not in lactose, maltose or salicin. Rabbits

were injected with doses ranging from 0.00001 c.c. to 8.0 c.c. of a twenty-four hour slant washed off with 10 c.c. saline. This culture had only been isolated three days when employed but showed no pathogenicity. In other respects it was a typical culture of *P. avicida*.

Nos. 5521-51-52-58-59-67-69-73. A group of nine worm infested birds from scattered points. The only gram negative rods encountered were shown to be members of the colon group.

No. 5571. Three chicken affected with coccidiosis. *Ps. pyocyanea* was the only gram negative organism encountered.

No. 5598. Three hens affected with "bumblefoot". All gram negative organisms encountered were shown to be members of the colon group.

Nos. 5605-06-53-91-94-96 and 5729. A group of eight birds infested with roundworms, tapeworms or both. Cultures from the nasal mucous membranes failed to show any organisms resembling *P. avicida*.

Only one organism that could definitely be classed as *P. avicida* was isolated from the nasal passages of sixty-one birds and it was not pathogenic for rabbits when injected three days after isolation in massive dosage. Two other organisms which may possibly have belonged to the Pasteurella group were isolated and they also were not pathogenic for rabbits. *S. pullorum* was isolated from the nasal passages of two birds. It is not known whether these birds were reactors as they had been disposed of prior to the examination of cultures.

Examination of the mucous membranes in a few cases of roup. The nasal or ocular mucous membranes of a few birds affected with nasal catarrh were examined for the presence of *P. avicida* by cultural methods and animal inoculation.

No. 4883. A roup bird infested with tapeworms. Cultures and animal inoculation were negative for *P. avicida*. Unidentified cocci, *E. coli* and a diphtheroid were present.

No. 4884. One of a group of parasitized birds. Eye badly affected. Animal inoculation and cultures were negative for *P. avicida*.

No. 4890. A bad case of roup. A large number of bacteria appeared on culture from among which *P. avicida* was isolated. It was not tested for pathogenicity.

No. 5532. Ocular roup. No organisms resembling *P. avicida* were recognized and intra-abdominal injection of the exudate in rabbits was negative.

No. 5535. Typical case of roup. *P. avicida* was recovered.

These five cases of roup gave cultures of *P. avicida* in two instances only. These results are in agreement with those obtained last year and in the earlier work to which reference has been made.

Agglutination and production of agglutinins. Rabbits were injected with the following cultures: Nos. 4714 (acute cholera), 4771 (roup) and A12120 (brain of fowl). Four doses of killed culture were injected by the subcutaneous route at intervals of five days, commencing with 1.0 c.c. and rising to 10.0 c.c. This was followed by four doses of live culture with the same dosage and intervals, five days after which the rabbits were bled. The living cultures were low in virulence, if not avirulent, at the time they were injected or such large doses could not have been employed. A rabbit that had tolerated 15.0 c.c. of one of these living cultures succumbed to a subcutaneous injection of 0.1 c.c. of a

virulent strain two weeks later. Antigens were prepared from twenty-three strains. They were suspended in 0.85% salt solution containing 0.5% phenol and as nearly as possible corresponding to tube No. 1 of McFarland's nephelometer. Tests were incubated for forty-eight hours at 37° C. The following table shows the strains that were agglutinated by the three sera employed.

Serum No.	Antigen No.	1-10	1-25	1-50	1-100	1-250	1-500	1-1000
4714	4714	+	+	+	+	+	+	P
"	4771	+	+	+	+	+	+	+
4771	4771	+	+	+	+	+	P	P
"	4714	+	+	+	+	+	P	P
"	4951	+	+	+	+	P	-	-
A12120	A12120	+	+	+	+	-	-	-
"	A12199	+	+	+	+	-	-	-
"	4765	+	+	+	-	-	-	-
"	S5459	+	+	+	+	P	-	-
"	T2742	+	+	+	+	-	-	-
"	A12189	+	+	+	+	-	-	-
"	4845	+	+	+	+	P	-	-

+ = Complete agglutination
 - = No agglutination.

P = Partial agglutination.

Serum No. 4714 (cholera) agglutinated only one other strain (roup), serum No. 4771 (roup) agglutinated two other strains (both cholera), and serum No. A12120 (brain) agglutinated six others (three fowl brains, two acute cholera and one turkey cholera). This serum had the lowest titre of the three with its homologous antigen. Hadley⁴ draws attention to the low agglutination titres obtained in vitro with fowl cholera serum. Serum specificity is very marked in this group. The same specific characteristics were apparent in some experiments in connection with immunization with killed and living cultures which have not been completed at the present time.

Pathogenicity. In the course of some work on immunization the lethal dose of some of the strains examined was found to be extremely small. One c.c. of a 10⁻⁹ dilution (one-billionth c.c.) killed in 24 hours by subcutaneous injection. The 10⁻¹⁰ dilution did not produce symptoms. This was a freshly isolated culture which three days later had dropped considerably in virulence. Hadley⁵ refers to a strain in which the M.L.D. was 10⁻²⁰ (one hundred-quillionth). Great variation was observed in the virulence of various strains. Some lost their pathogenic qualities very rapidly, while others retained a high degree of virulence after many subcultures.

Summary

1. Variations were again observed in the fermentation reactions of strains of *P. avicida* in media prepared by the addition of autoclaved solutions of carbohydrates to extract broth. Six strains produced acid in maltose and one in lactose. Six did not produce acid in mannite but all did in saccharose.

2. Only one definitely recognizable strain of *P. avicida* was isolated from the nasal chambers of sixty-one birds examined. It was not pathogenic for rabbits on intra-abdominal injection three days after isolation. Two other organisms isolated may have belonged to this group and were also lacking in

pathogenicity for rabbits. *S. pullorum* was isolated from the nasal passages of two birds. It is not known whether they were reactors as they had been disposed of prior to the examination of cultures.

3. *P. avicida* was recovered from the nasal or ocular discharges in two out of five cases of roup. The other three were negative for this organism by animal inoculation and culture.

4. Very little interagglutination was observed among twenty-three strains of *P. avicida* when tested with three monovalent sera.

5. Great variation was observed in the virulence of various strains and also in the power to maintain this quality under the same conditions of growth.

REFERENCES

- ¹Gwatkin, Ronald, Report Ontario Veterinary College for 1928.
²Fitch, C. P., and Nelson, E. N., Jour. A.V.M.A., N.S. 16, No. 2, May, 1923.
³Gwatkin, Ronald, Report Ontario Veterinary College for 1924.
⁴Hadley, Philip B., Jour. Bact., Vol. 3, No. 3, May, 1918.
⁵Hadley, Philip B., R.I. State College, Agr. Exp. Stn., Bul. 150, March, 1912.

ISOLATION OF *S. PULLORUM* FROM THE NASAL PASSAGES OF TWO FOWL

RONALD GWATKIN, D.V.Sc., and
J. S. GLOVER, B.V.Sc.

In the course of a bacteriological examination of the nasal mucous membranes of sixty-one birds for the presence of *P. avicida* the writers isolated two strains of *S. pullorum*. The ovaries of these birds appeared normal but were not examined bacteriologically, nor were the bloods tested as the carcasses had been disposed of prior to the examination of cultures.

No. 5121B. A fair sprinkling of small colonies developed on plate cultures from the mucous membrane. These were transferred to slants and passed through the routine sugars. Dextrose and mannite were split with the formation of acid and gas. Lactose, maltose, saccharose and salicin were not changed. The culture was agglutinated by a stock pullorum serum.

No. 43796. A light growth of fine colonies developed on plate cultures of the nasal membrane. Also a coccus which appeared to be *Staph. cremoris-viscosi*. The fine colonies were agglutinated by a pullorum serum and produced acid in mannite and dextrose. Lactose, maltose, saccharose and salicin were not changed. A rabbit injected with a suspension of the nasal swab from this bird died of a generalized infection and *S. pullorum* was recovered in pure culture from the liver.

It would have been of considerable interest to know whether these birds had infected ovaries and whether or not they were reactors. Is it possible that the location of the organism in this site might account for some of the reacting birds from which negative cultures are obtained from the ovary and other organs?

SEASONAL DISTRIBUTION OF CERTAIN POULTRY DISEASES

J. S. GLOVER, B.V.Sc.

This report is confined to diseases encountered at the Ontario Veterinary College from November 1st, 1928, to October 31st, 1929, but as specimens are received from various parts of the province it indicates in a general way the time of the year in Ontario when certain diseases are most prevalent.

A survey of the situation extending over several years would probably alter the percentages to some extent, although it is doubtful if the "peaks" of at least some of the diseases would occur in other months.

Comparing this report with the one published by Hinshaw and Bushnell of Kansas it is found that the seasonal variation found there is very similar to that found here in respect to pullorum disease, coccidiosis and worm infestation. The greatest losses from pullorum disease occur in Kansas in April, with only a slight variation in March and May. Coccidiosis reached the peak in May and worm infestation in September. The greatest percentage of fowl cholera outbreaks occurred in February. June, July and October were the most disastrous as far as enterohepatitis was concerned.

The six diseases included in this paper are fowl cholera, avian diphtheria, enterohepatitis (of turkeys and chicken), worm infestation, coccidiosis and pullorum disease of chicks.

Fowl Cholera. The highest percentage of cases occurred in January. The next highest month was October. In connection with fowl cholera it might be mentioned that this disease was more prevalent in October than this report indicates according to phone messages and letters received. No cases were encountered during November, February, June and August.

Avian Diphtheria. During the past year comparatively few cases have been sent in. The highest months were December, October and April. In May, June, July, August and November no avian diphtheria was found in poultry examined.

Enterohepatitis.—A fairly large percentage of cases of enterohepatitis found this year were in chicken. For the sake of convenience they have been grouped with those found in turkeys. The "peak" occurred in August, and, as might be expected, no specimens received showed blackhead lesions in March and December, and very few in the other spring and winter months.

Worm Infestation.—Under this heading are grouped the large roundworm (*Ascaridia lineata*), capillaria and tapeworms. The highest percentage of birds infested occurred in November and fairly high percentages in December, January, February, August, September and October.

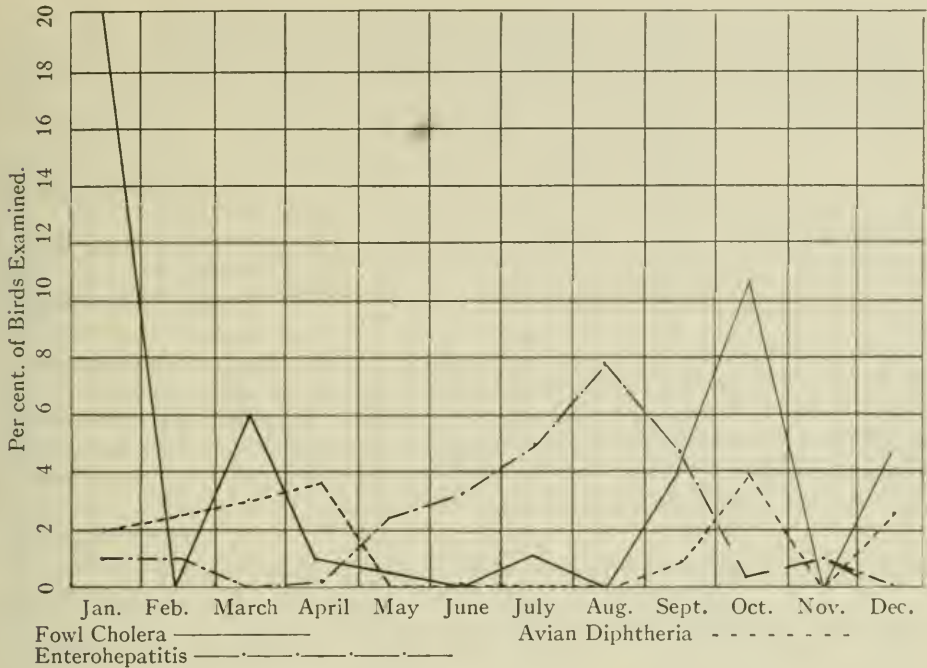
Pullorum Disease of Chicks.—This malady began its upward climb in February, reaching the peak in April. There was a slight decline in May, with a greatly lowered percentage in June and July.

Coccidiosis.—Only a comparatively small number of cases of coccidiosis were found until May. The peak was reached in July, although nearly as great a percentage occurred in June. In March and October no cases were found.

The accompanying table and graphs depict the rise and fall of these six diseases as occurring in specimens examined during the past year, and if this plan is adopted for several years it should give us a fairly accurate idea of the time to expect the greatest losses from them.

BIBLIOGRAPHY

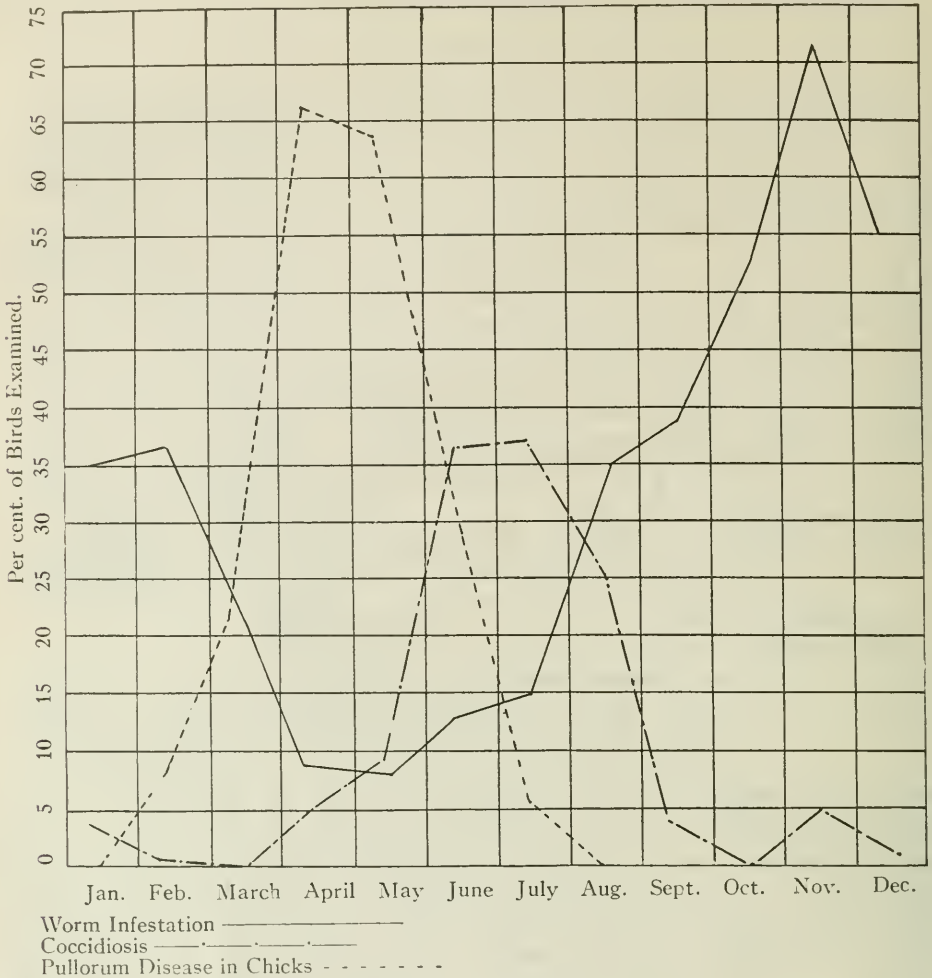
Hinshaw, W. R., and Bushnell, L. D., Jour. A.V.M.A., September, 1927.
Seasonal distribution as an aid to diagnosis of poultry diseases.



POULTRY EXAMINATIONS, 1928-1929

Condition or Disease	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
Abscess or other infections	1	3	2	7	5	3	2	2	8	3	9	4	49
Adult pullorum infection	1	1	4	1		1	3	1		1			13
Pullorum disease				6	22	215	270	70	11				594
Other chick diseases		2	1		3	6	17	4	6	2		1	42
Bumblefoot										2	5		7
Avian diphtheria		8	2	2	3	11					1	6	33
Roup and colds		3	1	1	3		2			3	8	19	40
Nutritional conditions	2	2	7	12	9	12	19	11	26	14	8	2	124
Cholera		5	18		6	3	3		2		3	17	57
Coccidiosis	4	2	3	1		15	35	91	64	32	3		250
Transient paralysis	1		1			1							3
Leukemia	2	3	4	2	1		4			1		5	22
Peritonitis	3	1	1	2	2	6	3				1		19
Tumours	5	2	5	5	5	7	4	4	4	2		4	47
Tuberculosis		5	4	6	4	6	8	3	4	5		5	50
Cystic oviduct			1		1	1							3
Ruptured oviduct	1	2					1	1			1	6	2
Infection of the oviduct	1		1			1							3
Enterohepatitis	1		1	1		1	11	9	8	10	4	1	47
Prolapse				1	1	1							3
Egg-bound and yolk concretions		1								1		1	3
Tracheitis	1							3	1				5
Visceral gout	1				1	1		1		1		3	8
Impaction of crop				1	3	1	1			1			8
Oedema of the wattles			2										2
Poisoning					2					2	4	1	9
Tapeworms	43	29	18	12	11	8	11	12	11	24	16	40	235
Roundworms	17	15	11	10	6	11	20	11	11	14	11	33	170
Round and tapeworms	2	9	3	5	5	10	3	9	3	7	4	8	68
Total	86	93	90	75	93	321	417	233	159	125	78	156	1,926

Putrid and not diagnosed, 45.



BRILLIANT GREEN IN CULTURE MEDIA FOR THE ISOLATION OF *S. PULLORUM*

J. S. GLOVER, B.V.Sc.

Mallman, Thorp and Semmes¹ in 1928 published an account of their investigations into the use of brilliant green to facilitate the isolation of *S. pullorum* by inhibiting bacteria commonly encountered in the specimens examined.

As a large number of chicks are examined here in the spring and early summer for pullorum disease it was decided to apply this method in routine work after some preliminary studies had been made.

In tests made by the writer it was found that a dilution of 1:75,000 of brilliant green suppressed or greatly reduced the growth of *Escherichia coli*, *Bacillus subtilis* and *Sarcinea lutea*. *Pasteurella avicida* was completely inhibited

in all cases. *Escherichia communior* and *Aerobacter aerogenes* were not affected by the dye. *Staphylococcus aureus* was checked but growth was not completely inhibited. *Salmonella pullorum* was not inhibited, giving as luxuriant a growth on brilliant green liver agar as on check plates of liver agar containing no dye.

Besides the 1:75,000 dilution, a dilution of 1:37,500 was also tried. No advantage was found in using the more concentrated solution.

The dye used was the National Aniline & Chemical Company's product as it was the one reported to be the most satisfactory. Stock solutions of 1:750 and 1:375 were prepared and kept in the ice chest. One cubic centimetre of the solution would be added to 100 c.c. of liver agar immediately before pouring the plates.

Sometimes as many as five solutions of the dye of various ages, ranging from freshly prepared to one hundred and twelve days old, would be used at a time to determine the "age" factor in the inhibiting powers of the dye. In the preliminary work on twenty-four hour cultures of the organisms used no difference in bacteriostatic power was observed between the freshest and oldest solution, but in the routine work it was decided not to use stock solutions that were more than a month old.

In the course of routine examination of chicks, duplicate cultures were made on brilliant green and plain liver agar on 268 specimens.

S. pullora was recovered in pure culture from 8 or 3 per cent. of the total by both types of media.

In twenty-three cases, or 8.5 per cent., no growth of any kind occurred on the brilliant green agar, but colonies of *S. pullora* were recovered on the plain liver agar plates.

Five cases, or 1.8 per cent., showed pure cultures of *S. pullora* on brilliant green agar, and no *S. pullora* in the growth on the check plates.

The number of cases in which *S. pullora* was recovered in pure culture on the brilliant green plates and mixed on the plain liver agar plates was 218 or 81 per cent. In most of these the growth on the plates containing the dye was heavier than on the others. In only one case was *S. pullora* recovered in pure culture on the plain liver agar and mixed on the brilliant green liver agar plates.

The routine method of examining chicks was to open them, exposing the liver, heart, lungs and intestines, after the plates were poured and solidified. A note was then made of the gross pathological lesions. Sterile rods were used to procure material from the heart, liver, lungs and intestines and spread it over the media.

This work indicates the value of brilliant green as an aid to bacteriological diagnosis of pullorum disease in chicks, but owing to the fact that in a small number of cases no growth occurs on the plates containing dye, cultures should be made on plain medium at the same time.

BIBLIOGRAPHY

Mallman, W. L., Thorp, Frank, Jr., and Semmes, Margaret. A medium for the isolation of *Salmonella pullorum* and other members of the Paratyphoid group from Avian tissues. *Journal of the A.V.M.A., N.S.*, Vol. 26, No. 7, November, 1928.

A ROPY MILK ORGANISM RECOVERED FROM THE
HEAD OF A FOWL

J. S. GLOVER, B.V.Sc.

Various organisms have been isolated from "ropy" or "slimy" milk, several of which have been traced to the water supply. On the other hand, the habitat of many of these bacteria is unknown.

A few years ago the writer had occasion to investigate an outbreak of ropy milk, and in this instance was able to rule out the water supply as a factor. The organism responsible was isolated and it was identified by Professor B. W. Hammer of Iowa State College as the *Staphylococcus cremoris viscosi*. One of the characteristics of pasteurized whole milk inoculated with this organism is that the "ropiness" does not extend below the cream layer. The outbreak cleared up before the natural habitat of the organism was determined, although not before feed, water, bedding and the external parts of the cows' udders were ruled out as factors in its dissemination.

In the course of routine examination of swabs from the nasal passages of fowl in connection with our *P. avicida* studies during 1929 an organism was isolated which showed a viscid growth on agar plates. This organism was studied morphologically, culturally and bio-chemically and was found to conform more closely to the *St. cremoris viscosi* isolated in an outbreak of ropy milk in Iowa by Hammer and Cordes¹ than to any of the organisms described by Buchanan and Hammer.² Both raw and pasteurized milk were seeded with the coccus and viscosity was produced in all samples at room temperature and 37.5° C.

Description. The organism was definitely spherical and arranged in irregular groups. Motility was not observed. It stained readily with the usual stains and was gram positive. No spores were observed.

Cultural characteristics.—

Beef infusion agar plate: Colonies grew readily at room and incubator temperatures. Large, white, opaque and viscid.

Beef extract agar plate: Essentially the same as on infusion agar, but less luxuriant.

Beef infusion agar slant: Heavy, white, smooth, raised, and viscid growth.

Beef extract agar slant: Less growth than on infusion agar slant but with same appearance.

Beef infusion agar stab: Slight growth along line of stab. Surface growth fairly heavy.

Beef extract agar stab: Similar to that of infusion agar stab.

Gelatin plate: Liquefaction in three days.

Gelatin stab: Liquefaction at top in three days. No growth along line of stab or liquefaction far below the surface after several days' observation.

Potato: White, moist, viscid growth.

Plain bouillon: Turbidity and slight sediment after twenty-four hours.

Litmus milk: Slightly acid after three days at room temperature. Marked acidity and coagulation after twenty-four hours at 37.5° C.

Biochemical reactions. Dextrose, saccharose and maltose were split with the formation of acid. No gas was produced. Mannite, lactose and salicin were not changed.

The increase in the acidity of milk was only slight.

Indol was not produced at room or incubation temperatures.

This report is submitted for publication as the writer has seen no reference to a ropy milk organism being recovered from the head of fowl. It is probably an uncommon occurrence but the knowledge might be of some assistance in the control of an outbreak of ropy milk.

REFERENCES

¹Hammer, B. W., and Cordes, W. A., An Unusual Outbreak of Ropy Milk, *Journal of Dairy Science*, Vol. 3, No. 4, July, 1920.

²Buchanan, R. G., and Hammer, B. W., Slimy and Ropy Milk, *Research Bulletin No. 22*, July, 1915, Ames, Iowa.

RECENT VIEWS ON MILK FEVER

(A contribution from the Students' Science Association).

By SALO JONAS, Dr. Sc. NAT.

Milk fever or parturient-paresis is an afebrile disease particularly affecting heavy milkers, which occurs most frequently at termination of parturition and is manifested by sudden loss of consciousness and a generalized paretic condition. It is essentially a disease of mature cows, especially of the heavy milk type, although it has been observed in other classes of cattle, as well as in sheep, goats and swine.

The actual cause of the disease is not definitely known, but it is evident that certain breeds of cattle, such as the Holsteins or Jerseys, or in general those of the heavy milking type, are most susceptible. It appears in cows mostly after the third calf, usually 18 to 24 hours after calving, but may occur at any time. The writer has observed cases which occurred more than three months after calving, and one Jersey which had a severe attack the day she aborted a seven months' old foetus. Some cows may show an individual predisposition to this disease and become affected after every parturition, while heifers and aged cows are very seldom attacked.

Various theories have tried to account for the cause of milk fever. According to Aronsohn, Zehl and Tetz, the cause of the disease is cerebral anemia due to the increased blood supply to the udder and vasomotor failure. The udder, and blood vessels lying between the abdominal wall and the udder, are capable of holding about one-half of the total blood supply of the body, and the inflation of the udder with air will equalize the circulation. Many investigators oppose this theory, because upon the removal of 20-27% of the estimated weight of the blood from the jugular on the day following calving, no disturbance similar to milk fever was caused.

Schmidt, Hutyra and Marek¹ favour the hypothesis of auto-intoxication as the most plausible, although they are not certain whether toxins are found in the uterus, udder or elsewhere in the organism. They claim that it is more of an anaphylactic auto-intoxication produced by the absorption of placental or milk protein. This theory has not been proven experimentally.

The theory of hypoglycemia seems to have been originated by an unknown Canadian veterinarian who was observing the experiments of M. Neefs (Belgium) on insulin hypoglycemia and found a great similarity in the symptoms developed following large doses of insulin, with those in milk fever. This idea was then

developed by M. Neefs in his theory of hypoglycemia. At the same time Widmark and Carlens of Sweden working independently reached the same conclusion and were supported by other investigators. They claim that the amount of glucose in the blood is reduced by the production of lactose. Consequently, 20 grams or more of glucose in solution was recommended intravenously or subcutaneously, but in many cases the udder was inflated as well, so that the results of the glucose treatment cannot be estimated.

The experiments by C. E. Hayden² show that the cause of milk fever must be sought elsewhere than in glucose deficiency and on the contrary he maintains that this disease presents a hyperglycemia. Out of 19 cases Hayden found a glucose average before inflation of 63.19 mg. per 100 c.c. of blood, while on the other hand only 41.15 mg. for normal cows. P. A. Fish³ shows that hypo- or hyperglycemia seem not to be the cause of milk fever but both seem to be the result of interference with the processes of oxidation of tissue.

As regards the guanidine theory Hayden² found that blood of milk fever cows shows a guanidine count three times greater than that of normal cows, but the highest average is 1 to 8 hours after inflation when the cow is convalescent. Hayden therefore comes to the conclusion that there is no basis for believing that guanidine toxemia is the cause of milk fever.

Greig^{4, 5} and Dryerre, of Great Britain made quite extensive calcium analyses of blood from milk fever cows and found that the calcium content of blood was greatly reduced during the attack, but after recovery soon returned to normal. Based on this finding they originated the hypothesis of hypocalcemia which indicates that a calcium deficiency is the prevailing factor in all milk fever cases, and that the disease might be combatted by the administration of an organic salt of calcium such as calcium gluconate. This treatment seems to have much in common with that given after thyro- and parathyroidectomy as well as in hypoparathyroidism in dogs and humans and points to a relationship between milk fever and tetany, the latter being a disease which may be regarded as an expression of hyperexcitability of the nerve cells resulting in spasm of certain muscles. MacCallum and Voegtlin⁶ carried out their experiments on dogs, inducing tetany by extirpation of the thyroid and parathyroid and found that the injection of an organic salt of calcium into circulation or given per os will check all symptoms of tetany and restore the animal to an apparently normal condition. Calcium lactate was administered to dogs and humans in frequent and large doses with very good results, symptoms disappearing mostly in a single day. MacCallum and Voegtlin also found a marked reduction of calcium in tissue and blood as well as in the brain and on the other hand a greater output of calcium in the urine and feces, and an increased output of nitrogen and ammonia in the urine; the ammonia content of the blood was also raised. These investigators drew attention to the change in metabolism after thyroidectomy and in hypoparathyroidism. There seems to be evidence of a form of an acid intoxication but its effects are not neutralized by the introduction of alkaline salts. They say that calcium salts have a moderating influence on the nerve cells and that the parathyroid in some way controls the calcium exchange in the body. It may be possible that in the absence of parathyroid secretions, substances arise which combine to abstract calcium from the tissue and cause its excretion, a process which would have been prevented by the normal functioning of the parathyroid glands. The parathyroids may also stimulate the absorption of calcium and it is not impossible that a greater amount of calcium may combat the toxins in some way.

Greig⁷ published recently the results of 32 cases of milk fever. Twenty-four cases, i.e., 75 per cent. were rapidly cured by the injection of calcium gluconate alone, while in the other eight cases the udder was inflated in conjunction with the injection of calcium. He believes, that relapses would be more likely to occur following the intravenous injection of calcium as compared with the mammary inflation. The injection of calcium into the circulation raises the calcium of the blood quite rapidly, but the calcium seems to be more quickly eliminated by excretions if given intravenously than when it is administered subcutaneously. Recovery from milk fever appears to be related to a rise in the calcium content. However, it does not always follow that a rise in a concentration of calcium in the blood results in recovery. Greig advocates the intravenous injection of 30 to 35 grams of calcium gluconate in a 10 per cent. solution, which should be reinforced by a subcutaneous injection of 20 grams of calcium gluconate in a 5 to 10 per cent. solution.

P. A. Fish⁸ in an interesting new article reports in twenty-five cases of milk fever an average of 2.39 mg. per 100 c.c. of inorganic phosphates as against 4.65 mg. for milk cows or 6.25 mg. for dry cows. Twenty-seven cases of milk fever showed an average of 3.31 mg. calcium per 100 c.c. He is of the opinion that there is in milk fever a hypocalcemia, a hypophosphatemia and a hyperglycemia.

A very important contribution to the subject has been made by B. Sjollema⁹ (Holland). He analyzed blood samples from thirty-nine milk-fever cases and found an average of 5.11 mg. of calcium per 100 c.c. of blood, which is very similar to the results obtained by Little and Wright (5.23) as well as Dryerre and Greig (5.18). Sjollema also found a decrease in inorganic phosphates averaging 2.25 mg. per 100 c.c. which is very near to that obtained by P. A. Fish (2.39). Sjollema is of the opinion that the deficiency in the secretions of the parathyroid glands are the direct cause of the disease. The parathyroid glands are not able to metabolize a sufficient quantity of calcium of the blood and tissues and this is manifested especially when the calcium-metabolism is called upon to meet greater demands as during parturition or oestrus. He believes that the deficient assimilation of calcium and phosphorus in heavy milking cows may be considered an indirect cause of milk fever. The deficiency in the secretions of the parathyroid glands as the fundamental cause of milk fever is supported by the successful results following injection of parathormon. Sjollema recommends the intravenous injection of 300-400 c.c. of a 10 per cent. solution of crystallized calcium chloride, sometimes supplemented by 1-2 mg. adrenalin, 50-60 gm. glucose and 10-20 mg. atropin.

Victor John Harding¹⁰ has just published a new paper giving his theory of dehydration as a possible cause of milk fever. Elaborating this theory, he points out that the volume of milk produced is an important factor in milk fever and may be correlated with the appearance of this disease in high milking cows. A 1,200-lb. cow loses about one-fifth of the volume of the circulating blood fluid through the secretion of two gallons of colostrum. A decrease in volume of blood due to the abstraction of water will result in a dehydration of blood (anhydremia) if there is an interference with its replacement from the body reserves.

Harding finds that the symptoms of milk fever (shock) closely resemble those in anhydremia in man and laboratory animals, and in all cases there seems to be evidence of a lack of circulating fluid. He therefore prefers the injection of 3-5 litres of 5 per cent. glucose as recommended by Widmark and Carlens to the injection of 200 c.c. of 10 per cent. glucose solution, and he claims that 10 to

30 litres of saline solution¹¹ should be given to make adequate fluid replacement if milk fever is due to anhydremia. Though there might be a prolonged process of dehydration in heavy milking cows, which condition would be accentuated by the loss of water in colostrum, it is difficult to reconcile Harding's hypothesis with the fact that the mammary inflation of air alone brings about a speedy recovery.

Jensen recorded 1,107 cases of milk fever in cows (as quoted by Hutyra and Marek) and the following diagram is made from these figures and shows the time of the appearance of this disease.

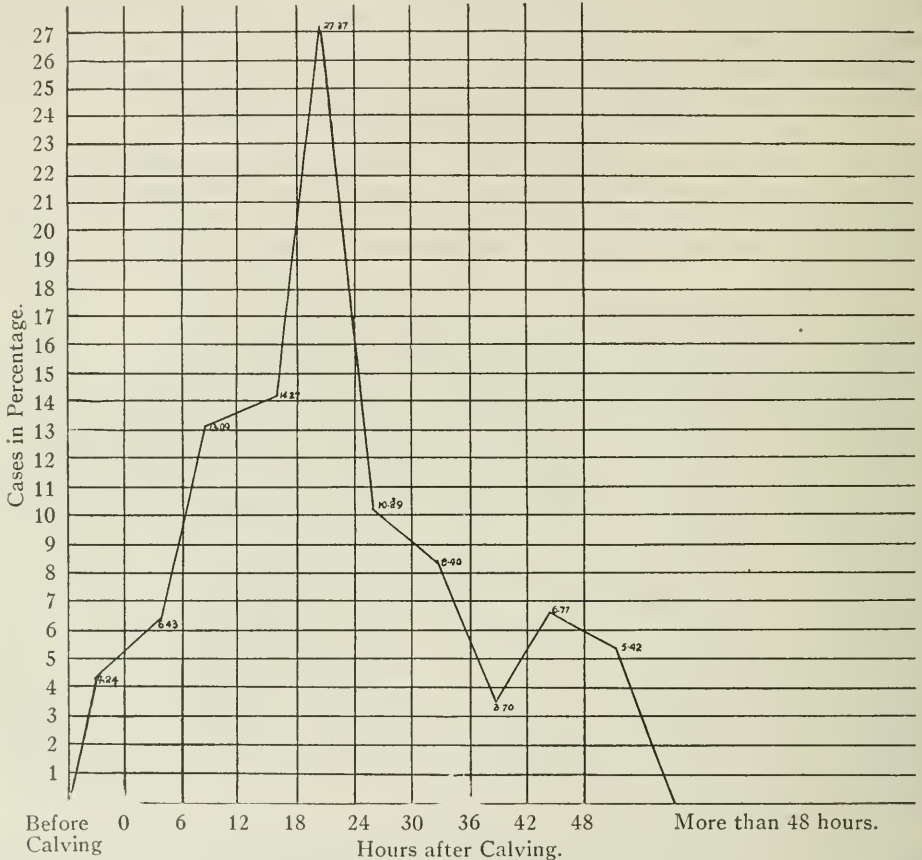


Diagram showing time of appearance of milk fever.

The curve rises very steeply and reaches its apex at 27.37 per cent. between 18 and 24 hours after calving; it then declines rapidly to 3.70 per cent. between 36 and 42 hours, from which point another slight upward curve begins, reaching its greatest height at 6.77 per cent. between 42 and 48 hours; 4.24 per cent. of cases occurred before calving.

The diagram shows that the majority of cases (65.02 per cent.) occurred 6 to 30 hours after calving, which would therefore indicate a correlation between parturition and milk fever. If we accept Fleischman's¹² estimated average of 1 per cent. minerals in the colostrum, a cow giving 12 kg. of colostrum would lose 120 gm. of minerals daily, of which about two-thirds are calcium and phosphorus. According to Eugling, as given in Ernst, Mohler and Eichhorn,¹³ the

mineral content in the colostrum varies from 0.82 per cent. (72 hours after parturition) to 1.55 per cent. (10 hours after parturition), but Fleischman reports variations as high as from 1.19 per cent. to 2.31 per cent. It seems to the writer that losses, above the average, of calcium and phosphorus, as well as of vitamins and other protective substances in the colostrum of high milking cows, are important contributory factors in the susceptibility to milk fever, and the possibility of certain cows showing the higher mineral losses in the colostrum year after year would explain individual predisposition to this disease after every calving.

Characteristic symptoms of the disease are uneasiness, slight excitability, grinding of teeth, sometimes developing spasm of certain muscles, staggy gait, saliva runs from mouth, then patient goes down, is unable to rise, head turns toward sternum, and paralysis of pharynx, oesophagus and other organs of digestion and of locomotion develop. The cow is in a state of partial or complete unconsciousness, does not respond to calls or blows; eyes are dull and pupils dilated, the temperature is normal or slightly subnormal, the pulse is not always changed but may in later stages be small and even imperceptible. Post-partum paralysis and rupture of blood vessel have to be differentiated from milk fever, but in both these cases no symptoms of unconsciousness are seen.

Until 1897 losses were very heavy and as high as 66 per cent. In that year Schmidt¹⁴ developed a treatment consisting of the injection of one quart of 1 per cent. solution of potassium iodide into the udder through funnel, hose and milk catheter, allowing a quantity of air to enter the udder also. This treatment was then substituted by the inflation with atmospheric air or pure oxygen and the mortality was reduced to less than 10 per cent. In the writer's experience during the past summer about 80 cases were treated by mammary inflation without a single loss.

The cow is milked out thoroughly and the teats disinfected. The milk catheter is introduced into the milk canal after being disinfected and the inflated air is purified by passing through a layer of cotton moistened with pure carbolic or oil of eucalyptus. The udder is inflated tensely so that the air is felt in glandular tissue at the base of the udder. The teats are then tied and left for two or three hours. If inflation is done in recumbent position it is advisable to inflate the lower quarters first. The cow is placed in a comfortable position on lots of bedding, and is supported with straw so that she is made to lie upon her sternum, or better still, slightly inclined to the left side to avoid tympanites. If tympanites occurs the rumen should be tapped. The air is left in the udder for about twelve hours and then milked out thoroughly. If the cow does not get up in four or five hours she should be reinflated.

The same treatment applies if disease occurs on pasture, but the cow must be kept warm and comfortable and should only be pulled in as a last resort in bad weather.

In some cases it is advisable to supplement the treatment of mammary inflation by the injection of 300-400 c.c. of a 10 per cent. solution of calcium gluconate intravenously or subcutaneously, or by intravenous injection of 300-400 c.c. of a 10 per cent. solution of crystallized calcium chloride. Other circulatory disturbances should be watched and 10-20 mg of atropin and 1-2 mg. of adrenalin may be administered. Never drench the patient as suffocation or mechanical pneumonia may take place. Saline cathartics, ginger and nux vomica or ammonium carbonate may be given after recovery. The food rations should be reduced when the cow is convalescent to minimize the danger of a relapse, and it is advisable to include mineral food in the diet. Some cases may

be prevented by feeding pregnant cows very lightly the last three or four weeks before calving.

SUMMARY

The deficiency in the endocrin secretions of the parathyroid glands and derangement in metabolism seem to be the cause of parturient paresis and this is supported by the successful results following injection of parathormon. As the calcium metabolism is mainly controlled by the hormones of the parathyroids, it would seem that the calcium deficiency is not in itself the fundamental cause of the disease, but the effect of hypoparathyroidism. However, as milk fever occurs mainly a short time after parturition (6-30 hours), the sudden output into colostrum of calcium and phosphorus, as well as of vitamins and other protective substances, would greatly accelerate the process and results of hypoparathyroidism.

There are very wide variations in the mineral content of the colostrum and the probability of certain cows showing losses of minerals and protective substances in the colostrum, above the average, year after year, would explain individual predisposition of milk fever after every calving. It is not impossible that some cases of milk fever are influenced in some degree by cerebral anemia, low blood pressure and vasomotor failure.

It seems that the injection of calcium does not combat the disease always but it is probable that it restores the calcium balance in the blood and tissues temporarily, which may account for the relapses which sometimes occur. However, it might facilitate complete recovery if the parathyroids, reinforced by the injection of calcium have in the meantime resumed their normal function. The calcium gluconate and crystallized calcium chloride treatments have proven successful in a number of cases, nevertheless they cannot substitute the mammary inflation in routine work, but in many cases can be used as supplementary therapy.

Thanks are due to Dr. C. D. McGilvray, Principal of the Ontario Veterinary College, and Dr. R. A. McIntosh for their courtesy in supplying literature and helpful suggestions.

BIBLIOGRAPHY

- ¹Hutyra and Marek, Pathology and Therapeutics of Diseases of Large Animals, Vol. 3.
- ²C. E. Hayden, Sugar, Guanidine and Cholesterol in the Blood of the Cow, Cornell Veterinarian, July, 1929.
- ³Pierre A. Fish, The Physiology of Milk Fever, Cornell Vet., April 21, 1927.
- ⁴J. Russell Greig, Milk Fever, Vet. Record, No. 30, Vol. 6, July 26, 1926.
- ⁵J. Russell Greig, Nature of Lambing Sickness, Vet. Record, No. 24.
- ⁶Endocrinology and Metabolism, D. Appleton, 1922, Vols. 1 and 3.
- ⁷J. Russell Greig, Calcium Gluconate as a specific in Milk Fever, Vet. Record, No. 6, Vol. X, February 8, 1930.
- ⁸P. A. Fish, Recent Progress in our Knowledge of Milk Fever, Journal of A.V.M.A., December, 1929.
- ⁹B. Sjollem, Over het wezen en de therapie van paresis puerpuralis, 1928.
- ¹⁰Victor John Harding, A Review of Some Recent Theory of Milk Fever, University Press, Toronto, 1930.
- ¹¹V. J. Harding, Note on Some Urine and Blood Chemistry in Milk Fever, Journal of A.V.M.A., December, 1929.
- ¹²W. Fleischman, Lehrbuch der Milchwirtschaft, 1922, pages 147 and 148.
- ¹³Ernst Mohler and Eichhorn, Milk Hygiene, 1914.
- ¹⁴Moussu and Dollar, Disease of Cattle, Etc., 1900.
- ¹⁵J. Russell Greig, H. Dryerre, Norman C. Wright, Calcium Therapy in Milk Fever, Vet. Record, No. 27, Vol. IX, July 6, 1929.

UNIVERSITY OF TORONTO
REPORT
OF THE
BOARD OF GOVERNORS
FOR THE
YEAR ENDED 30th JUNE
1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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UNIVERSITY OF TORONTO

REPORT

OF THE

BOARD OF GOVERNORS

FOR THE YEAR ENDED 30TH JUNE, 1929

To His Honour the Lieutenant-Governor-in-Council:

The Governors of the University of Toronto have the honour to submit their twenty-third annual report, including the President's review of the academic work of the University and its Colleges for the Session 1928-29, the reports of various officers and departments, and the usual statements in detail of the receipts and expenditures of the Board for the fiscal year which closed on 30th June, 1929, with the certificate of the auditor, Mr. G. T. Clarkson, attached.

A further purchase of property on the east side of St. George Street was made during the year, another house and lot being secured for approximately \$25,000. The building is a substantial one in good condition, and when vacated by the occupant in the near future will be available, it is expected, for University use with but a small outlay. This purchase exhausted the balance of the fund at the Board's disposal for such acquisitions and a portion of the cost had to be charged to revenue account.

Work was begun early in the year upon the construction of the new building for Pathology and allied departments which is now in course of erection on the north side of College Street, opposite the Toronto General Hospital, and which the Board have decided will be fittingly named "The Banting Institute." The cost, including the freeing of the site from certain leasehold interests, will be about \$900,000. With the approval of Your Honour-in-Council debentures to the extent of \$800,000, payable over the ensuing twenty years, were issued by the Board and the payment thereof guaranteed by the Province; and with the like approval a sum of \$100,000 was transferred to the Construction Account from surplus revenues available. Any additional sum required for furnishings can, it is hoped, be provided from the annual budget of the next year or two.

The ordinary revenue of the year was \$1,370,214, and in addition there was received the special Legislative grant of \$1,209,143, making a total gross income of \$2,579,357.

The expenditure under the appropriations for salaries and maintenance failing to be met out of general revenue (exclusive of the Ontario College of Education, which is supported by a separate vote) was \$2,445,808. To this it is necessary to add the sums written for interest to scholarship and other trust funds, \$31,374, and the amount transferred to the Land Purchase Account to

complete the purchase of the St. George Street property already referred to, \$13,743, making an aggregate expenditure from revenue of \$2,490,925. The balance of \$88,432 has been carried forward in the Special Contingent Fund to meet future needs which may arise.

All of which is respectfully submitted.

H. J. CODY,
Chairman.

Toronto, 30th November, 1929.

PRESIDENT'S REPORT

1928-29

To the Governors of the University of Toronto:

GENTLEMEN:

I beg to submit the following report on the academic work of the University and University College during the twelve months ended June 30th, 1929.

The total staff of the University and University College numbered 712, of whom 107 were professors, 74 associate professors, 51 assistant professors, 138 lecturers, associates (in medicine and dentistry) and instructors in the College of Education, 2 directors, 1 director of field work, 339 demonstrators, fellows and instructors with sessional appointments. They were distributed as follows:

	Professors	Associate Professors	Assistant Professors	Associates	Lecturers	Directors	Assistant Directors	Instructors	Other Sessional Appointments
University (Faculty of Arts)..	36	24	19	—	20	—	—	—	88
University College.....	14	11	5	—	12	—	—	—	7*
Faculty of Medicine.....	24†	12	19	18	13‡	—	—	—	173
Faculty of Applied Science...	14	13	7	—	11	—	—	—	41
Faculty of Household Science	2	—	1	—	3	—	—	—	9
Faculty of Forestry.....	2	2	—	—	1	—	—	—	—
Faculty of Music.....	—	—	—	—	4	—	—	—	1
Faculty of Dentistry.....	13§	6**	1††	12	2	—	—	—	21
Public Health Nursing.....	—	—	—	—	11‡‡	1	—	—	—
Social Service.....	—	—	—	—	9§§	1	1	—	—
Ontario College of Education	4	7	—	—	14	—	—	18	—

*One also in Applied Science.

†One also in University.

‡One also in Dentistry; two also in Ontario College of Education.

§One also in Medicine.

**One also in Medicine.

††One also in Medicine.

‡‡Four also in Medicine; one also in Dentistry.

§§One also in University.

In Victoria College there were:

Professors.....	12
Associate Professors.....	8
Lecturers.....	2
Instructors.....	1
Fellows.....	3

In Trinity College there were:

Professors.....	14
Lecturers.....	3

In St. Michael's College there were:

Professors.....	12
Lecturers.....	14

I regret to report the death of the following:

William Henry Vander Smissen, M.A., Ph.D., emeritus professor of German; Clarence Leslie Starr, M.B., M.D. (Bellvue), LL.D. (McMaster), professor of surgery; Peter Gillespie, B.A.Sc., C.E., M.Sc., professor of civil engineering; Guy George Hume, D.D.S., professor of orthodontia; Sir Bertram Windle, M.A., M.D., Sc.D., LL.D., F.R.S., special lecturer in ethnology.

On his retirement from the chair of German in University College in June 30th, 1913, I made mention of the services of Professor Vander Smissen, and I now would recall again the fact that with his death on January 3rd, 1929, an accomplished scholar passed away and a devoted son of the University of Toronto.

Dr. Starr died after a brief illness on December 25th, 1928; a few months before it would have been thought that he was in his prime and had a great work before him still to accomplish. Appointed in 1921 as the first so-called full-time professor of surgery Dr. Starr through many difficulties reorganized the department of surgery, and stimulated a promising group of young surgeons from whom much is to be expected in the future. By his skill, his administrative ability, and his integrity of character he had won the respect of colleagues and students who still regret what seems to us our premature loss.

Very suddenly on May 26th, 1929, Professor Gillespie passed away. He was one of the most beloved men in the University, a teacher of unusual ability and an engineer thoroughly respected in the profession. The memory of his kindly personality will linger long, especially in the Faculty of Applied Science.

Dr. Guy Hume died on the 9th of June, 1929, in the prime of life and in the fullness of his powers, greatly regretted not only by many in the University but by a large cricle of friends.

Sir Bertram Windle died suddenly on February 14th, 1929. In Great Britain and in Ireland he had had a most distinguished career, first as professor of anatomy in the University of Birmingham, then as dean of that faculty of medicine, and later as President of Cork College. He was widely known as a scientist and as a writer on religious subjects. Since 1920 he held in St. Michael's College the important chair of anthropology and cosmology. For six years he gave a series of twelve lectures annually in the University on ethnology to overflowing audiences to whom he had the power of presenting historical and scientific subjects in a most attractive manner.

The following retired:

William Stafford Milner, M.A., professor of Greek and Roman history.

For thirty-eight years Professor Milner has been on the staff of University College which he has served with fidelity and distinction. With a thorough grasp of political problems he endeavoured to impress upon his students the inner meaning of the history of Greece and Rome, and not a few of the most distinguished graduates of University College look back to him as one who first taught them appreciation of that world to which our present civilization owes so much. He is followed into retirement with the affection of his colleagues.

The following resigned their positions:

Andrew Hunter, M.A., B.Sc., M.B., Ch.B. (Edinburgh), professor of biochemistry; James Metcalfe MacCallum, B.A., M.D., C.M., professor of ophthalmology; George Malcolm Smith, M.A. (Oxon), professor of history; Horace Bradbury Speakman, D.Sc. (Manchester), professor of zymology; Alexander Grant Brown, M.A. (Oxon.), associate professor of ancient history; James W. Coran, D.D.S., associate professor of operative dentistry; William Goldie, M.B., associate professor of clinical medicine; Earle Douglas MacPhee,

M.A., B. Educ. (Edin.), associate professor of psychology; John Hamilton Parkin, B.A.Sc., M.E., associate professor of mechanical engineering; Frederick Adam Cleland, B.A., M.B., assistant professor of obstetrics and gynaecology; James Forrester Davison, B.A., LL.B. (Dal.), LL.M. (Harv.), assistant professor of Roman law and jurisprudence; George Hunter, M.A., B.Sc. (Glasgow), assistant professor of pathological chemistry; Duncan Neil MacIennan, M.D., C.M., assistant professor of ophthalmology; George Sills Young, B.A., M.B., assistant professor of medicine; John A. Bothwell, D.D.S., associate in dentistry; Benjamin O. Fife, D.D.S., associate in dentistry; Bertram Reuben Gardiner, D.D.S., associate in dental surgery and anaesthesia; Henry George Robb, D.D.S., associate in dental surgery and anaesthesia.

The resignations of these gentlemen have been received with regret and I take this opportunity of expressing the thanks of the University to them for the valuable and in some cases distinguished service which they have rendered.

To the great regret of the University, Professor Andrew Hunter left, after fourteen years of distinguished service in teaching and research, to become professor of biochemistry in the University of Glasgow.

Professor J. M. MacCallum was professor of therapeutics from 1891 to 1907, became associate of ophthalmology in 1903, associate professor of ophthalmology in 1909, and on the retirement of Dr. Reeve took the headship of the department of ophthalmology in 1914. He also represented the University for many years, first on the Ontario Medical Council and then on the Dominion Medical Council. Throughout this long period Dr. MacCallum has with his wide experience and ripe judgment given devoted service to his *Alma Mater* and has earned her warm gratitude.

Professor George M. Smith who resigned his chair of modern history was one of the most valuable members of the younger staff, and will be greatly missed both in the Council and in the class room.

Professor Speakman resigned the chair of zymology which he had held since 1919 to undertake the very important duties of director of the new Ontario Research Foundation for which his experience and scientific attainments have particularly fitted him.

Leave of absence was granted to the following:

Robert William Angus, B.A.Sc., professor of mechanical engineering; James Alfred Dale, M.A. (Oxon), professor and director of the department of social service; Frederick William Marlow, M.D., C.M., associate professor of gynaecology; James Forrester Davison, B.A., LL.B. (Dal.), LL.M. (Harv.), assistant professor of Roman law and jurisprudence; Miss Eva M. McMillan, Ph.B. (Chicago), lecturer in household science; Miss Charlotte Frances Valentine, M.A., lecturer in household science.

The following new appointments and promotions were made during the year:

In the Faculty of Arts—Appointments: Malcolm William Wallace, M.A., Ph.D. (Chicago), principal of University College; Herbert Spencer Jackson, A.B. (Cornell), professor of mycology; Marcus Donald Campbell Tait, B.A. (Oxon), assistant professor of Greek; Norman Jamieson Endicott, B.A., lecturer in English; Robert Finch, B.A., lecturer in French; Edgar McInnis, B.A. (Oxon), lecturer in History; Louis Alexander MacKay, M.A., lecturer in Latin; Jan Gabriel Perold, M.A., lecturer in political economy; Louis Shere, M.A. (Manitoba), lecturer in political economy.

Promotions: Robert Strachan Knox, M.A. (Aberdeen), B.A. (Oxon), from an associate-professorship to a professorship in English; Eric Trevor Owen,

M.A., from an associate-professorship to a professorship in Greek; George Oswald Smith, M.A. (Oxon), from an associate-professorship to a professorship in Latin.

• Fulton Henry Anderson, B.A. (Dal.), M.A., Ph.D., from an assistant-professorship to an associate-professorship in philosophy; William Harold Trevor Baillie, M.A., M.D., from an assistant-professorship to an associate-professorship in mammalian anatomy; George Henry Duff, M.A., Ph.D., from an assistant-professorship to an associate-professorship in plant physiology; John Richardson Dymond, M.A., from an assistant-professorship to an associate-professorship in systematic zoology; William Stanley Funnell, M.A., from an assistant-professorship to an associate-professorship in chemistry; Harold Boyd Sifton, M.A., Ph.D., from an assistant-professorship to an associate-professorship in plant morphology and ecology; Ellis Thomson, B.A.Sc., from an assistant-professorship to an associate-professorship in mineralogy; William John Webber, B.A. (Cantab), from an assistant-professorship to an associate-professorship in mathematics.

Sperrin N. F. Chant, M.A., from a lectureship to an assistant-professorship in psychology; Andrew Robertson Gordon, M.A., Ph.D., from a lectureship to an assistant-professorship in chemistry; William John Knox Harkness, M.A., from a lectureship to an assistant-professorship in limnobiology; John Henry Iliffe, M.A. (Cantab), from a lectureship to an assistant-professorship in the history of industrial art; David Anton Frederick Robinson, M.A., from a lectureship to an assistant-professorship in mathematics.

In the Faculty of Medicine—Appointments: Charles Herbert Best, M.A., M.B., D.Sc. (Lond.), professor of physiology; Henry Borsook, M.B., Ph.D., lecturer, biochemistry; Ernest James Clifford, M.B., lecturer, bacteriology; Neil McKinnon, M.B., lecturer, hygiene and epidemiology, School of Hygiene; Miss Mary Ross, B.A. (Dal.), M.A., lecturer, vital statistics, School of Hygiene.

Promotions: William Ludlow Holman, B.A., M.D., C.M. (McGill), from an associate-professorship to a professorship in bacteriology; Horace Bradbury Speakman, D.Sc. (Manchester), from an associate-professorship to a professorship in zymology; William Lipsett Robinson, M.B., B.A. (McM), from an assistant-professorship to an associate-professorship in pathology; William Albert Scott, B.A. M.B., from an associateship to an assistant-professorship in obstetrics and gynaecology.

In the Faculty of Applied Science—Appointments: Carson Frederick Morrison, B.A. (Sask.), M.Sc. (McGill), lecturer, civil engineering: municipal and structural.

Promotions: Ernest Waldemar Banting, B.A.Sc., from an assistant-professorship to an associate-professorship in civil engineering; Albert Russell Zimmer, B.A.Sc., from an assistant-professorship to an associate-professorship in electrical engineering.

In the Faculty of Household Science—Appointments: Miss Mary A. Copus, M.A., lecturer; Miss I. L. Courtice, lecturer.

In the Ontario College of Education—Appointments: Miss Bertha Bassam, B.A. (Qu.), lecturer, library science; Miss Annette Marsh, lecturer in art.

Promotions: George Augustus Cornish, B.A., from an associate-professorship to a professorship in methods in science; William Chalmers Ferguson, B.A., from an associate-professorship to a professorship in methods in modern languages; William James Lougheed, M.A., B.Paed., from an instructorship to an associate-professorship in methods in mathematics.

In the Department of Social Service—Appointments: Edward Johns Urwick, M.A. (Oxon), acting director; Miss Berta Hamilton, M.A. (St. And.), lecturer.

The total number of students registered in the University, in Colleges and Faculties, in 1928-29 was 6,051, distributed as follows:

	Men	Women	Total
Faculty of Arts.....	1,838	1,489	3,327
University of Toronto.....	450	238	688
University College.....	756	602	1,358
Victoria College.....	357	403	760
Trinity College.....	145	134	279
St. Michael's College.....	142	128	270
Registered twice.....	12	16	28
Faculty of Medicine.....	671	75	746
Faculty of Applied Science and Engineering.....	583	3	586
Faculty of Household Science.....	...	167	167
Ontario College of Education.....	251	288	539
Faculty of Forestry.....	66	...	66
Faculty of Music.....	19	15	34
School of Graduate Studies.....	286	128	414
Faculty of Dentistry.....	228	21	249

In Departments there were registered 371, distributed as follows:

Department of Social Service.....	3	84	87
Department of Public Health Nursing.....	...	208	208
University Extension (Occupational Therapy).....	...	55	55
University Extension (Course for Graduate Nurses).....	...	21	21
Registered twice.....	45	32	77
	3,900	2,522	6,422

In addition there were 2,845 persons registered in the Department of University Extension in courses and at provincial centres which are referred to in detail in Appendix A (14).

The figures may be further analyzed as follows:

FACULTY OF ARTS

University of Toronto

	Men	Women	Total
Teachers' Courses and Summer Session.....	211	191	402
Occasional Arts students.....	239	47	286
	450	238	688

University College

	Men	Women	Total
First year undergraduates.....	284	175	459
Second year undergraduates.....	180	165	345
Third year undergraduates.....	139	112	251
Fourth year undergraduates.....	126	116	242
Occasional students.....	27	34	61
	756	602	1,358

Victoria College

	Men	Women	Total
First year undergraduates.....	81	108	189
Second year undergraduates.....	119	110	229
Third year undergraduates.....	88	100	188
Fourth year undergraduates.....	68	81	149
Occasional students.....	1	4	5
	357	403	760

Trinity College

	Men	Women	Total
First year undergraduates.....	52	44	96
Second year undergraduates.....	46	37	83
Third year undergraduates.....	30	27	57
Fourth year undergraduates.....	16	25	41
Occasional students.....	1	1	2
	145	134	279

St. Michael's College

	Men	Women	Total
First year undergraduates.....	64	42	106
Second year undergraduates.....	35	38	73
Third year undergraduates.....	24	26	50
Fourth year undergraduates.....	16	20	36
Occasional students.....	3	2	5
	142	128	270

FACULTY OF MEDICINE

	Men	Women	Total
First year undergraduates.....	82	11	93
Second year undergraduates.....	117	10	127
Third year undergraduates.....	130	17	147
Fourth year undergraduates.....	126	8	134
Fifth year undergraduates.....	96	15	111
Sixth year undergraduates.....	95	10	105
Candidates for Degree of B.Sc. (Med.).....	5	1	6
Candidates for D.P.H.....	10	1	11
Post Graduate Students.....	7	1	8
Occasional students.....	3	1	4
	671	75	746

FACULTY OF APPLIED SCIENCE AND ENGINEERING

	Men	Women	Total
First year undergraduates.....	199	1	200
Second year undergraduates.....	160	1	161
Third year undergraduates.....	125	1	126
Fourth year undergraduates.....	99	...	99
	583	3	586

FACULTY OF HOUSEHOLD SCIENCE

	Men	Women	Total
First year undergraduates.....	...	55	55
Second year undergraduates.....	...	42	42
Third year undergraduates.....	...	38	38
Fourth year undergraduates.....	...	30	30
Occasional students.....	...	2	2
	...	167	167

ONTARIO COLLEGE OF EDUCATION

	Men	Women	Total
Students in attendance.....	107	226	333
Extra-mural students.....	25	38	63
Students in B.Paed. course.....	119	24	143
	251	288	539

FACULTY OF FORESTRY

	Men	Women	Total
First year undergraduates.....	22	...	22
Second year undergraduates.....	22	...	22
Third year undergraduates.....	12	...	12
Fourth year undergraduates.....	10	...	10
	66	...	66

FACULTY OF MUSIC

	Men	Women	Total
First year undergraduates.....	6	10	16
Second year undergraduates.....	5	2	7
Third year undergraduates.....	6	3	9
Candidates for Mus. Doc. degree.....	2	...	2
	19	15	34

SCHOOL OF GRADUATE STUDIES

	Men	Women	Total
Candidates for Ph.D.....	57	23	80
Candidates for M.A.....	83	53	136
Candidates for Ch.M.....	1	...	1
Candidates for M.A.Sc.....	7	...	7
Candidates for M.Arch.....	1	...	1
Candidates for C.E.....	3	...	3
Candidates for Mech.E.....	1	...	1
Candidates for E.E.....	2	...	2
Candidates for D.Paed.....	54	8	62
Candidates for M.S.A.....	14	...	14
Graduate students.....	63	44	107
	286	128	414

FACULTY OF DENTISTRY

	Men	Women	Total
First year undergraduates.....	23	...	23
Second year undergraduates.....	27	...	27
Third year undergraduates.....	52	1	53
Fourth year undergraduates.....	66	1	67
Fifth year undergraduates.....	54	1	55
Candidates for the Degree of B.Sc. (Dent.).....	6	...	6
Occasional students (Dental Nurses).....	...	18	18
	228	21	249

DEPARTMENT OF UNIVERSITY EXTENSION

	Men	Women	Total	Grand Total
<i>B.A. Course:</i>				
Summer Session				
Regular.....	79	76	155	...
Occasional.....	10	10	20	...
Teachers' classes:				
Toronto:				
Regular.....	121	79	200	...
Occasional.....	6	3	9	...
Hamilton:				
Regular.....	15	22	37	...
Occasional.....	4	14	18	...
Fort William:				
Regular.....	1	6	7	...
Occasional.....	4	9	13	...
Windsor:				
Regular.....	4	4	8	...
Occasional.....	...	2	2	469
<i>Specialists' Courses:</i>				
Summer Session:				
Regular.....	8	..	8	....
Occasional.....	1	...	1	9

DEPARTMENT OF SOCIAL SERVICE

	Men	Women	Total
First year full-time students.....	...	23	23
Second year full-time students.....	2	12	14
Part-time students.....	1	49	50
	3	84	87

DEPARTMENT OF PUBLIC HEALTH NURSING

	Men	Women	Total
Full-time students.....	...	31	31
Part-time students.....	...	177	177
	...	208	208

The degrees conferred were:

	Men	Women	Total
LL.D. (Honorary).....	1	...	1
D. Litt. ".....	1	...	1
Ph.D.....	7	5	12
M.A.....	44	30	74
M.D.....	405	25	*430
Ch.M.....	1	...	1
M.A.Sc.....	4	...	4
D.Paed.....	3	...	3
M.S.A.....	2	...	2
B.A.....	204	248	452
B.Comm.....	35	5	40
M.B.....	11	4	15
B.Sc. (Med).....	4	1	5
B.A.Sc.....	88	...	88
B.Arch.....	11	...	11
B.H.Sc.....	...	27	27
B.Paed.....	22	3	25
B.Sc.F.....	9	...	9
Mus. Bac.....	2	...	2
LL.B.....	3	...	3
D.D.S.....	56	...	56
B.Sc. (Dent).....	5	...	5
B.S.A.....	31	1	32
B.V.Sc.....	18	...	18
Phm.B.....	100	7	107
	1,067	356	1,423

*Including 360 conferred upon graduates who held the M.B. degree .

The constant demands from within and from without for accommodation and for additional departments of study, repeated with more or less urgency until they are either met or discarded, often make one ask whether the visit of a fairy goddess bringing millions of money, as she often does to American universities, would really be a blessing. At first sight she would be hailed as a benefactress, and be given a warm welcome. The day probably will come when wealthy Canadians will wish to have their names added to the already worthy roll of benefactors of the University of Toronto. Meantime it is useless to draw up very comprehensive plans of the ideally desirable; we must be content to provide for the most insistent requirements. Should some benefactor offer us \$3,000,000—not an extravagant suggestion in an American university circle—the money might at once be spent in such a way as to do little more than give easy space to Botany, the Library, Applied Science, History, Economics, Psychology, University College residences, and the physical and social activities of the women of the University, to say nothing of the Royal Ontario Museums. Three millions dollars is a staggering sum, and yet were it available the Governors could use it at once without the waste of a dollar or being guilty of extravagance. Depressing though this constant iteration of the needs for more accommodation is, it is necessary for the Governors to keep in mind this external side of the development of the University.

The erection of buildings is probably the channel in which in a State university private benefactions can carry the most permanent benefit to the people at large. They are more likely to be architecturally attractive than those built

at the expense of the State, because the donor having his name associated with the structure will usually spend more money upon it than is allowable from public funds. For expansion in teaching the State may be relied upon. Additions to teaching departments and the creation of new chairs are forced upon it by the natural progress of education and the intellectual life; and they can usually be met by comparatively small expenditure; but a laboratory or a library involves such large capital outlay that even the best disposed government must hesitate often until the building is long overdue. Thus a provincial university must exercise something of the spirit of the thrifty housewife who is grieved at the sight presented by her boys in patched or shrunken clothes. The moralist says that there are some compensating advantages, but it is doubtful how far poverty itself has been an aid in bringing up her family. At any rate the University of Toronto has been justified of her children, but she is still and probably will continue to be subjected to more discipline in the *res angusta domi* than is good for her.

The Legislature has dealt in a kindly way with the Provincial University, and I believe that the Government will always listen to the reasonable requests that we may present to them for the welfare of this great institution. It rests upon us to give proof that we make adequate returns to the intellectual, spiritual, and economic life of this province for the large amounts of money that are from time to time made available by the Legislature. That we do so can hardly be questioned, for this province has been served well by the graduates of the University of Toronto, and the increasing respect in which it is held by universities of the world is an external proof of the quality of the work done in the institution by staff and students.

Naturally one is asked whether the pressure is not due to an overcrowding of students, and whether if we were more rigid in our entrance requirements we should not get relief. Unfortunately the situation cannot be met so easily. Most of the pressure is due to developments that in the nature of the case must take place in a great modern university. Laboratories and libraries are necessities for professional and postgraduate as well as undergraduate work in Arts. Except Applied Science, in which during the past few years there were reduced numbers, no other professional faculty shows any decided tendency to increase. The largest numbers are in the pass courses in Arts and in the Teachers' courses. These latter have shown a gratifying growth, and professors always have expressed their satisfaction with the kind of response given to their efforts by these mature and earnest students. While they lay a burden, willingly borne, on the departments, it can be met by additions to the staff, and their instruction is given at such a time that they do not increase the congestion of laboratories or libraries.

There is, however, a large element which is below university rank in the pass classes of the first year, and in my judgment the time is at hand when the university should affirm once again, as it did years ago when the other universities of the province hesitated to follow, that the standard of entrance to Arts, and to the professional faculties, should be honour matriculation. But it need not be expected that this reduction will materially lessen the pressure on space. By far the largest portion of the work of the first year is done in the colleges. Fewer instructors would be needed in college subjects, and mathematics would be greatly relieved. But the Arts work as a whole and the professional faculties would continue to make the same demands as at present.

It would, however, be of great educational advantage to the province to have all the work of the standard of the pass first year in Arts done in the High

Schools. Young men and women would be more mature on coming to the university, and at the end of the first year there would be fewer disappointments which are often of serious consequence in the life of the student. Increasing experience leads me to reaffirm more strongly than ever the advisability of having this change introduced as soon as possible.

During the past year there have been as usual a number of resignations from the staff of persons, who after having given some years of excellent service have left for other Canadian or American universities, one to return to a chair in the Old Land, and some to enter upon other activities. The loss is felt by the University, but we cannot complain if those who have served us well leave for higher promotion than is possible for them here at the time. The effective attraction of a higher salary when a professor is feeling the burden of educating a young family often lies in the immediate relief that is hoped for, but it must not be supposed that by any means all those who are invited do leave this university, nor is the fact of removal to be taken as a proof of greater distinction in those who go than in those who remain. A moderate amount of change is good for any institution, and hitherto we have been able to draw to our service year after year recent graduates, as well as experienced professors, from some of the leading universities on both sides of the ocean. We often forget how rich we are in talent until the periodical call comes to some member of our staff.

The amount of the annual expenditure of the University on salaries is about 58 per cent. of the total, which compares very favourably with other universities in this respect, but the greater universities of the United States, which usually draw most powerfully, have a scale of salaries which so far we have been unable to approach.

The advantages of this place are manifold, and not the least is the opportunity offered of hearing distinguished lecturers from elsewhere who draw interested audiences, and who in more direct contacts with the teaching staff do much to emphasise newer phases of their subject and bring personal stimulus. During the past few years some of the leading experts of the world in physics, chemistry and other sciences, in history and literature also, have visited us. A list of the extra-curricular lecturers of the past year is given later in this report.

Probably we are more defective in the cultivation of the fine arts than other universities of our standing. Hart House has done much for the men students, but very little has been done for the women students. This city appreciates music, there is a fine Conservatory owned by the University, and there are regular and much appreciated organ recitals, but there should be some person whose business it would be to discover musical talent in the student body and to develop it. Interest in the other fine arts also is developing in Toronto. In the Archaeological Museum we have one of the really great fine art museums of this continent (in the worst way, unfortunately, in need of more space), and there are the beginnings of what is sure to be a good picture gallery at the Grange. We need a liason professor who will help students to understand the principles of art and to illustrate them from our galleries. Our homes in Canada are being built and furnished with greate taste than formerly, and our people need to realize that the appreciation of the beautiful may be associated with simplicity.

The importance of modern architecture has led to the lengthening to five years of the training given in the University for this profession.

The investigation of the natural resources of this very rich province has occupied for years and increasingly the attention of many of the staff, and it would be difficult to estimate the results of their work. Investigation is being conducted on the ores, and in the forests; men are co-operating with the Colleges

at Guelph in agriculture and veterinary science; they are studying fishery problems, and the economic conditions of some of our basic industries. Here, however, I should like to emphasize the need of scientific Botanic Gardens for Toronto. In South Africa I found excellent gardens in every city, and visitors from England are surprised that in this respect we are so backward in Eastern Canada. For years Professor Thomson has been seeking to meet this need by promoting conjoint effort of city and university. The beauty of our ravines would be greatly enhanced and the richness of our flora much increased by the establishment of such gardens. At no great expense the city would find its attractiveness heightened for our own people, and for our rapidly growing inflow of visitors every summer, by a well-laid out botanical park for the maintenance of which it would be natural to expect a good deal of private support.

Most gratifying is the growth of the School of Graduate Studies in which last year there were enrolled ninety-one students from other provinces of the Dominion than Ontario, and in addition there was a good representation from countries beyond our bounds. This infusion of life from other centres is welcomed as bringing new interest to our own graduates and to the Graduate School. Opportunities are afforded these students for meeting together socially, and a few of the women find rooms in university residences, but the School will not do its best until larger headquarters are provided. Each year offers additional proof of the value to the University and to Canada of the postgraduate fellowships which, through the generosity of friends, have now for a good many years been open to students from other Canadian universities.

It is a significant statement of the Dean of Education that so many of the teachers of the Schools now hold university degrees, but unfortunately we have not our proportion of specialists in the High Schools, and that not because the scholarship of our graduates is not equal to that of other universities of the Province. It does seem that it might be an advantage to have one external examination for specialists to be taken by all applicants not only from this Province but from elsewhere.

Through our Extension Department the number of teachers in Toronto and other centres studying for a degree has been steadily rising. Last year 119 teachers entered and thirty-four graduated, being enrolled for instruction in Toronto, Hamilton, Fort William and Windsor. From these the inspectors of the public schools are being chosen more regularly than before. In Britain adult education has long attracted the attention of leading men and women, and last August an important conference on this phase of education was held in London. In Toronto, work of this type, leading to no diploma or degree, has been proceeding apace, as is shown by the fact that 1,488 attended classes in a great variety of subjects in Toronto and other urban centres.

The University is deeply indebted to Professor Urwick for having again, in the continued absence of Professor Dale through ill-health, taken the burden of the directorship of the Department of Social Service. He recommends that the curriculum should be reorganized to give more fundamental courses, and that graduates should if possible be induced to enter on a profession for which urgent calls for help come from many cities of the Dominion.

Also under Miss Russell investigation into problems of nursing education is being carried out earnestly and wisely notwithstanding the very limited amount which the University is able to spend upon that department.

From the Connaught Laboratories comes the usual report of widespread and developing activities. Such extraordinary results have been obtained from the use of diphtheria toxoid that the control of diphtheria is now quite feasible

in any country. Advice on questions of public health is given in the School of Hygiene in addition to the preparation and wide distribution of the products of the Laboratories.

It is a pleasure to report, as I have almost uniformly been able to do, that the general health of the students is extraordinarily good, and that the standard of the second year is always higher than that of the same group in the first year. The one regret is that the lack of a women's building makes it impossible to do as much for the women as for the men, especially in the second year. This need has been so often referred to that I hope we may soon find some means of meeting it. The University is fortunate in those who have the oversight of the health, the social and the athletic activities of men and women undergraduates.

For the spirit in which athletics are conducted the universities of Canada have been highly recommended in the Bulletin just issued by the Carnegie Foundation on "The Present Situation of Athletics in American Colleges and Universities." Some two years ago the investigator spent several days on the grounds and in Hart House looking for himself into the actual conditions of sport. At that time he expressed a very favourable opinion of what he saw, so that the terms of the report have not occasioned any surprise, but it is most gratifying to have this comment from an independent outsider who forms his judgment after comparison with other universities on this continent. It is to be hoped that "what we have we'll hold." Our strength is in the quality of the oversight and direction of our athletics as well as in the healthy minded interest of our graduates.

In Hart House also there is fine co-operation on the part of the faculty and graduates with the warden and his efficient staff. Early in the year there was presented to the House by Canon and Mrs. Cody a Speaker's chair in memory of the late Maurice Cody, a most suitable memorial of one who was deeply interested in the debates and other activities of the undergraduates. Also Professor Wrong with his family made a gift to the House of \$5,000 in memory of his two sons, both graduates of this university, Harold, who fell in the war, and Murray, who died last year very early in a brilliant career in Oxford, the proceeds to be devoted to the stimulation of appreciation of art.

Indications of the quality of the scientific and literary output of the staff come constantly from many quarters. One of the most recent was the election of Professor Lash Miller as an honorary member of the American Electro-chemical Association, an honour which he shared with four others, one of whom was Mr. Edison.

During the session the following special lectures were delivered:

The Marfleet Lectures by Professor William Bennett Munro, of the department of Government, Harvard University, on "Some Constitutional Analogies and Contrasts," "Party Organization and Practical Politics," and "City Government in the United States and Canada"; three lectures inaugurating the Alexander Lectureship by Dr. Louÿs Cazamian, Professor of English Language and Literature at the Sorbonne, University of Paris, on "Parallelism in the Recent Development of English and French Literatures"; three lectures on "Old Injected Rocks, their Character and Origin" by Dr. J. J. Sederholm, Director of the Geological Survey of Finland; two lectures on "General Strikes, Trade Unions, and the Law," and "Present Day Developments in English Jurisprudence" by A. L. Goodhart, Esq., K.C., M.A., LL.M., Lincoln's Inn, London, England, editor of the "Law Quarterly Review"; two lectures on "L'histoire de la langue et l'histoire de la civilization" and "L'origine des langues romanes" by Professor Wilhelm Meyer-Lübke of the University of Bonn; a lecture on "The Continuity

of Rome" by Sir Rennell Rodd, M.P., British Ambassador to Italy, 1908-1919; a lecture on "Some Practical Conclusions from Scientific Research in Dental Construction" by Dr. Alfred Gyse, professor of prosthetic dentistry and dental histology in the University of Zurich; two lectures on "Hungary in the Old Empire" and "The New Regime" by Stephen Czako, Esq., LL.D., J.D., Royal Hungarian Ministerial Vice-Secretary, Budapest; two lectures by Monsieur Pierre Franck, Ingénieur en chef de l'aéronautique Française on "Electric and Radio Apparatus for Aviation" and "Blind Flying"; two lectures on "Bentham and the Fragment of Government, 1776" and "Burke and the American Revolution" by Professor Ernest Barker of the University of Cambridge; the Balfour Lecture in Medicine on "The Surgical Diseases of the Stomach" by Dr. Donald C. Balfour of Rochester, Minn.

Six lectures and discussions were given in connection with the Department of Physics on "Band Spectra" by Professor R. Mulliken of the University of Chicago.

The ten fortnightly recitals on the organ in Convocation Hall by the University Organist, Dr. F. A. Mouré, have again been most successful.

A special convocation was held on November 7th, 1928, for the purpose of conferring the honorary degree of Doctor of Laws upon the Right Honourable Sir Austen Chamberlain, K.G., Secretary of State for Foreign Affairs, and the honorary degree of Doctor of Letters upon His Excellency Paul Claudel, Ambassador of France to the United States.

During the past year the University has received the following benefactions, totalling \$505,056.23:

From the E. C. Whitney Bequest, \$394,348.27; Eaton Endowment, \$25,000; Estate of the late James Harris, James Harris Scholarships, \$25,000; Laura Spelman Rockefeller Memorial for Child Welfare, and premium, \$10,000 and \$14.47; Estate of the late Mrs. E. A. Wintercorbyn, Wintercorbyn Bequest, \$8,158.36; Donations in the Faculty of Dentistry: J. P. Bickell, \$3,000; Anonymous donour, \$1,800; Ash-Temple Company, Limited, \$250; Ontario Dental Association, \$250; Royal College of Dental Surgeons, \$250; Canadian Dental Dealers Club, \$150; Estate of the late Dr. R. W. Rutherford, Dr. James Page Rutherford Medical Research Fund, \$5,000; Graduate Fellowships: Imperial Oil Company, \$500; Sir Edward Kemp, \$500; Colonel R. W. Leonard, \$500; Robert Simpson Company, \$500; Canadian Pacific Railway, \$1,500; University Schools Scholarships: H. J. Crawford Memorial, \$1,000; Dr. T. M. Porter, \$1,000; Dr. T. M. Porter (gift of F. S. Corrigan, Esq.), \$1,000; Sir John Eaton Memorial, \$120; Langford Rowell Scholarship, \$100; Maurice Cody Memorial, \$75; Flavell-Peacock Lectureship: Sir Joseph Flavell, \$1,250; E. R. Peacock, Esq., \$1,250; Hugh Innis Strang Memorial Scholarship, \$2,497.25; Joseph Henderson Memorial Scholarship, \$2,035; Morley Wickett Scholarship, \$2,000; Political Science Scholarship, \$1,400; Margaret Anna Brock Scholarship, \$1,000; Social Service Council of Ontario Scholarships, \$800; Jenkins Brothers, Limited, scholarship in engineering, \$500; Robert Bruce Scholarship, \$463.40; Sir Edmund Walker Scholarship, \$450; S. R. Parsons Scholarship, \$250; Maurice Cody Memorial Scholarship, Modern History, \$200; Robert Simpson Company, Limited, Scholarship, \$150; Boiler Inspection and Insurance Company Scholarship, in mechanical engineering, \$150; Jardine Memorial Prize, English verse, \$100; Darling and Pearson Prize, in architecture, \$100; Toronto Brick Company Prizes, in architecture, \$100; McCaul Scholarship in Classics: Principal M. Hutton, \$25; George H. Fraser, Esq., \$25; A. M. Stewart, Esq., \$25; Squair French Library Fund, \$65.52; Mathematics Scholarship, Professors Beatty and Pounder, \$50;

Dr. R. A. Reeve Prize, \$50; Hon. Charles McCrae for Dent McCrea Scholarship, \$50; British Association Advancement Science Fund, for prize books, \$33.96; University College Alumnae Prize in English, \$10; Professor F. Tracy, prize in ethics, \$10.

Under the chairmanship of the late Honourable Sir Edward Kemp, K.C.M.G., a committee of friends of the late Maurice Cody raised the sum of \$50,000 for the purpose of establishing Memorial Research Fellowships and Scholarships in the University of Toronto "designed to encourage the study of Canadian economic conditions and to secure through careful investigation the facts necessary to understand questions arising from national growth and changing conditions." The first appointment has been made on this munificent foundation.

A very large meeting (over 700 members) of the Modern Language Association of America held its sessions in the University for three days in December, 1928. It was regarded as one of the most successful meetings of this association, and by our various modern language departments as being of great value to their work.

All of which is respectfully submitted.

R. A. FALCONER,
President.

November 14th, 1929.

REPORT OF THE PRINCIPAL OF UNIVERSITY COLLEGE

PROFESSOR M. W. WALLACE, M.A., PH.D.

The retirement of Principal Maurice Hutton at the end of last session marks the conclusion of an epoch in the history of University College. For almost half a century he had occupied the chair of Greek; for almost thirty years he had been Principal. No man has left the mark of his influence more indelibly impressed on the College, and graduates and undergraduates alike have long regarded him with pride and affection. He retires from active service with the warm good-will of his colleagues and former students.

Professor W. S. Milner, the oldest remaining member of the staff, resigns his chair of Ancient History at the end of the present session. A graduate of University College in 1881, he was appointed to the staff in 1889, and has made a profound impression on successive generations of students. Many a classical graduate gladly recognizes that to Professor Milner he owes his earliest interest in the fundamental questions of politics and government. That the study of Greek civilization is a unique instrument of education for many of the ablest minds in our modern world, he has never doubted. He has found nothing narrow or cramping in the ideal of a university course concentrated on a single great civilization particularly as revealed in a very few of its great books and great men. Our Department of Classics suffers a serious loss in Professor Milner's retirement.

Professor Grant Brown of the same department has also resigned his chair in order to devote his whole time to business responsibilities. Professor Brown graduated from University College in 1903, and after spending two years at Oxford joined the staff of the College in 1905. Few members of the faculty came into more intimate contact with their students. Professor Brown's resigna-

nation will be deeply regretted not only by his colleagues but by the many students who had come to appreciate his worth whether in study groups or his own home.

Mrs. Haddow and Mrs. Creighton have both resigned from the Department of English. Mrs. Haddow after a brilliant course in University College and subsequently at Oxford joined our staff some ten years ago; Mrs. Creighton began her teaching work here two years ago after previous experience in the University of British Columbia. Both were excellent teachers whom we are sorry to lose.

Professor W. R. Taylor, head of the Department of Oriental Languages, has been granted leave of absence for the session 1929-1930. Professor Taylor is to lecture in the American School of Oriental Research in Jerusalem, and to carry on his own research work.

In February last the Alexander Lectureship, founded in honour of Professor W. J. Alexander, was inaugurated by Professor L. Cazamian of the Sorbonne in a course of three lectures delivered in Convocation Hall. The subject of the lectures was "Parallelism in the Recent Development of English and French Literatures." The second course will be given next session by Professor H. W. Garrod, Fellow of Merton College, and formerly professor of poetry in the University of Oxford.

A course of twelve public lectures was given by members of the staff of the College during the past session on Thursday afternoons at five o'clock, and on almost every occasion the West Hall was entirely inadequate to accommodate those seeking admission. It is proposed to offer a similar course next session.

Through the generosity of various friends of the College a number of new scholarships have been founded which are open for competition at the Honour Matriculation examinations in June. One of the largest gifts ever made to the University for scholarship purposes is that of Mrs. James Harris in memory of her husband who died in January last. This munificent gift consists of \$25,000 in the form of long-term six per cent. bonds. The Alumni Association of University College has given us four matriculation scholarships, and single scholarships have been given by the Chairman of the Board of Governors, Mrs. Cody, Mr. J. J. Gibson of the Board, and Mr. S. R. Wickett. These generous gifts should serve a great purpose in the life of the College, especially in view of the fact that heretofore the College has been singularly weak in this respect.

The members of the staff have purchased and presented to the Senior Common Room a silver tray, kettle, tea-pot, etc., of unusual interest. The purchase was made from Mrs. Jarvis of Montreal, a daughter of the late Professor H. H. Croft, and according to an inscription on the tray it was "Presented to Professor Henry H. Croft, D.C.L., Captain of the University Rifle Corps, by the members of the Company, Toronto, February 21st, 1863." It is appropriate that this silver should find a permanent home in the Croft Chapter House.

The superintendent and architects are hard at work on the plans for the new women's residences which, it is hoped, will be ready for occupation at the beginning of the session 1930-1931.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

The geographical distribution of students is as follows:

FACULTY OF ARTS

	Univer- sity of Toronto	Univer- sity College	Victoria College	Trinity College	St. Michael's College	Dupli- cates	Totals
Ontario: (1) Province.....	391	521	435	128	113	16	1,572
(2) Toronto.....	269	764	260	130	123	8	1,538
Nova Scotia.....	4	..	1	3	..	..	8
New Brunswick.....	..	3	2	1	2	..	8
Prince Edward Island.....	..	4	..	..	..	..	4
Quebec.....	2	..	2	1	2	..	7
Manitoba.....	3	5	..	..	..	..	8
Saskatchewan.....	3	10	26	1	..	..	40
Alberta.....	4	8	10	2	2	..	26
British Columbia.....	4	7	1	2	..	..	14
Yukon.....	..	2	..	..	..	..	2
United States.....	5	26	5	9	26	4	67
Elsewhere.....	3	8	18	2	2	..	33
Duplicate registrations.....	..	..	..	..	..	..	..
Totals.....	688	1,358	760	279	270	28	3,327

SUMMARY

	Faculty of Arts	Faculty of Medicine	Faculty of Applied Science and Engineering	Faculty of Household Science	Ontario College of Education	Faculty of Forestry	Faculty of Music	School of Graduate Studies	Faculty of Dentistry	Department of Social Service	Department of Public Health Nursing	Course in Occupational Therapy	Course for Graduate Nurses	Registered Twice	TOTALS
Ontario:															
(1) Province....	1,572	312	288	58	303	29	8	132	123	31	126	15	14	32	2,979
(2) Toronto....	1,538	350	257	99	187	26	17	184	62	33	62	39	7	33	2,828
Nova Scotia.....	8	2	1	..	4	..	..	11	2	5	..	..	..	2	31
New Brunswick.....	8	..	..	..	3	..	..	8	2	1	1	..	..	2	21
Prince Edward Island	4	..	1	..	..	1	..	1	1	..	..	..	..	..	8
Quebec.....	7	2	1	1	4	3	1	10	1	1	1	..	..	..	32
Manitoba.....	8	2	1	..	6	1	..	7	23	2	..	1	..	..	51
Saskatchewan.....	40	20	14	2	9	..	4	12	21	..	5	..	..	1	126
Alberta.....	26	8	8	2	2	1	1	5	2	1	..	..	..	1	55
British Columbia....	14	27	5	4	6	..	..	16	2	8	..	..	..	3	79
Yukon.....	2	1	1	..	..	..	..	..	..	..	..	..	..	..	4
United States.....	67	11	4	1	8	..	3	13	7	..	..	..	..	..	114
Elsewhere.....	33	11	5	..	7	5	..	15	3	5	13	..	..	3	94
Totals.....	3,327	746	586	167	539	66	34	414	249	87	208	55	21	77	6,422

The students from the Province of Ontario are distributed as follows:

	Faculty of Arts	Faculty of Medicine	Faculty of Applied Science and Engineering	Faculty of Household Science	Ontario College of Education	Faculty of Forestry	Faculty of Music	School of Graduate Studies	Faculty of Dentistry	Department of Social Service	Department of Public Health Nursing	Course in Occupational Therapy	Course for Graduate Nurses	Registered Twice	TOTALS
Algoma	14	9	7		1	1					5		1	2	36
Brant	36	9	10	1	5			6			3		1	1	70
Bruce	34	6	4		3			2	6	1	6	1		1	62
Carleton	63	8	7	5	21	1		8	9		1			3	120
Cochrane	1														1
Dufferin	19	7	2		7			1	1		4				41
Dundas	12				5			1	1		1				20
Durham	28	7	2		1		2	1		1	3		1		44
Elgin	22	4	4	1	7			1	3	2	2			1	45
Essex	51	12	6	2	11	1		3	5	1				1	91
Frontenac	3	1		1	12			2	1	1	2			1	22
Glengarry	3	1		1	4					1	1				11
Grenville	8	1	1		3			3		1					17
Grey	46	5	10	3	5			5	3	1	8	2			88
Haldimand	28	5	9	1	4			1	2						50
Haliburton															
Halton	45	8	7	5	4			3	1		7	1			81
Hastings	18	7	3		4			1	3		5	1			42
Huron	50	12	8	1	6	2		5	3	2	3		1		91
Kenora	6		1		1				2						10
Kent	23	6	4	1	8			1	3					1	45
Lambton	27	5	2	1	5	1		6	5		1				53
Lanark	17		4		15		1	5	7	1	2				52
Leeds	13	1	2	1	4	1			2						24
Lennox & Addington	11			1	2						2			1	25
Lincoln	40	5	11	3	4			3	1		4	1			72
Manitoulin	6		1												7
Middlesex	21	2	9	2	27	1	1	12	5	2			1	1	82
Muskoka	16	2	7		3			3	2						33
Nipissing	10	12	2	1	7			1	2		1	3		1	38
Norfolk	16	9	2		3			1	4		2	1		1	37
Northumberland	28	5	3	1	4			3	2		2			1	47
Ontario	53	10	9	5	10	1	1	4	4		6				103
Oxford	26	6	12		6	2					2				54
Parry Sound	6	1	2	1				1	2	1	3		1		18
Peel	42	9	8	2	2			3	1	1	3				71
Perth	48	9	12		8	3		1	1		5	2	2		91
Peterborough	29	6	5	2	3			1	2	1	5		2		56
Prescott	2				5				1						8
Prince Edward	2	2			3			1				1			9
Rainy River	9	1								1					11
Renfrew	24	3	1		5	2			3		2		1		41
Russell		1	1		1										3
Simcoe	94	19	14	2	11	4		3	7		11		1		166
Stormont	9	1	1		3										14
Sudbury	8		1	1		1									11
Thunder Bay	34	4	12		4	2	1		4	1					62
Timiskaming	14	1	3		1				1		1		1		22
Victoria	20	5	3	1	1			1			5				36
Waterloo	64	12	12	1	6			5	3		3		1	3	104
Welland	41	12	6	1	9			3	3				1	2	74
Wellington	60	15	5	1	9			14	1		1			3	103
Wentworth	172	25	17	5	18		1	9	12	10	2	1	1	3	270
York	100	21	36	4	12	6	1	8	5	2	12	1		3	205
Toronto	1,538	350	257	99	187	26	17	184	62	33	62	39	7	33	2,828
Totals	3,110	662	545	157	490	55	25	316	185	64	188	54	21	65	5,807

AUDITOR'S REPORT

Toronto, 14th November, 1929.

TO THE GOVERNORS OF THE UNIVERSITY OF TORONTO:

Gentlemen:

I have verified the attached Balance Sheet of the University, dated 30th June, 1929, and Schedules 1 to 10, and report that all the transactions of the year upon Revenue and Capital Accounts have been duly audited and found correct.

Yours faithfully,

G. T. CLARKSON,

Auditor.

FINANCIAL STATEMENT

Balance Sheet, 30th June, 1929

FUNDS AND LIABILITIES

General Endowment Fund.....	Schedule 1.....	\$9,448,401 21
Specific Endowment Funds.....	“ 2.....	390,445 56
Retirement Fund.....	“ 3.....	79,129 39
Trust Funds.....	“ 4.....	3,117,448 76
Annuity Debentures.....	“ 5.....	1,693,064 23
Contingent Funds, etc.....	“ 6.....	966,974 28
Fees paid in advance.....		730 00
Royal College of Dental Surgeons.....		50,000 00
		\$15,746,193 43

ASSETS

Site lands, Buildings and Contents.....	Schedule 7.....	\$8,860,053 13
Unproductive Lands.....	“ 8.....	58,574 87
Leased Properties.....	“ 9.....	717,519 15
Investments, Cash and Accounts Receivable..	“ 10.....	5,075,802 97
Royal Ontario Museum Investment.....		248,376 30
Ontario Government Annuities (16 George V, Cap. 69).....		146,101 33
Ontario Government Annuities (18 George V, Cap. 55).....		630,342 32
Superintendent's Stores.....	Appendix IV.....	9,423 36
		\$15,746,193 43

Note.—This statement does not include any assets or liabilities of the Toronto Conservatory of Music.

SCHEDULE 1

GENERAL ENDOWMENTS FUND

Additions for 1928-29:

Convocation Hall Advance:

Restoration from proceeds of Wild Lands Sales, twenty-third instalment.....	\$214 20
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Annuity debentures:

Portion of 1928-29 instalments reducing principal:

Twentieth instalment, issue of July, 1909.....	\$11,084 95
Eighteenth instalment, issue of January, 1911....	2,677 00
Eighteenth instalment, issue of January, 1911....	6,153 00
Fourteenth instalment, issue of April, 1915.....	1,820 53
Fifth instalment, issue of July, 1924.....	4,581 10
	26,306 58

Botanical building, new greenhouse, entered at cost.....	8,440 06
Land and building, No. 49 St. George Street, purchased for.....	25,007 51

Increased valuation of University Park leases upon renewal:	
Lot 43 and part Lot 42.....	\$14,000 00
Part Lot 42.....	6,000 00
Lot 57.....	13,000 00
Lot 60.....	6,000 00
Lot 61.....	6,000 00
	\$45,000 00
Lot 22, University Park, formerly leased, now restored to Site Lands as site of new Pathological building, 28,655 sq. ft. at 40 cents	11,462 00
Frontage Licenses, University Avenue:	
Four transactions.....	12,236 67
York Street property sold for.....	\$95,000 00
Less amount hitherto carried in Schedule 9.....	27,000 00
	68,000 00
Library Proper:	
Additions for year less depreciation (Schedule 7).....	27,512 39
Present value of Legislative Grant:	
Annuities payable under 18 George V, Cap. 55, 20 annual instal- ments of \$52,157.68 covering principal and interest at 5 per cent. (first payment received in 1928-29).....	650,000 00
	\$874,179 41
<i>Contra</i>	
Valuations written off:	
From Site Lands (Schedule 7):	
Easterly portion of Lot 13, additional 837 sq. feet at 40 cents, correcting entry of last year to agree with Account.....	\$334 80
From Leased Properties (Schedule 9):	
Four leases on Lot 22, written off upon surrender.....	25,600 00
Old Pathological building on Hospital block, conveyed to Toronto General Hospital.....	169,694 38
Annuity Debentures, issue of January, 1929, to provide for the con- struction of a new building for Pathology and allied de- partments.....	800,000 00
	995,629 18
	\$121,449 77
Return of 30th June, 1928.....	9,569,850 98
Return of 30th June, 1929.....	\$9,448,401 21

SCHEDULE 2

SPECIFIC ENDOWMENT FUNDS

(Scholarships, Prizes, etc.)

A. A. A. S. Scholarship (Physics, etc.).....	\$2,350 00
Aggett, Harvey, Memorial (Applied Science).....	1,627 01
Aikins (English Literature).....	5,031 63
Alexander Lectureship (English Literature).....	14,513 05
All Souls' Historical Essay Prize.....	2,592 03
Armstrong, George H. (History).....	2,296 48
B. A. A. S., Medals, etc.....	33 96
Balfour Lectureship (Surgery).....	4,495 17
Balmer, Jean (Science).....	1,195 93
Bankers' (Political Science).....	1,200 00
Baptie, Margaret W. (Medicine and Science).....	4,047 47
Blake (Matriculation).....	31,256 72
Blake (Science and Moderns).....	3,750 00
Boiler Inspection and Insurance Company (Applied Science).....	150 00
Booth (University Schools).....	1,000 42
Brickner, Rabbi (Social Service).....	1,084 11
Brock, Margaret A. (Matriculation, English and History).....	1,025 18
Brown, George, Memorial (Medical Science).....	10,655 46
Brown, George (Modern Languages).....	1,128 34
Bruce, Robert (Arts and Medicine).....	902 68
Chappell, Walter F., Prize (Medicine or Surgery).....	528 93
Cockburn, G. R. R. (Greek).....	1,050 00
Cody, Maurice, Memorial (Modern History).....	831 74

Cody, Maurice, Memorial (University Schools).....	\$250 69
Coleman Medal (Geology).....	509 68
Crawford, Allan Rudyard (University Schools).....	500 00
Crawford, Henry Job (University Schools).....	1,000 00
Darling and Pearson Prize (Architecture).....	100 00
Dickenson, Marion E. (Household Science).....	5,531 30
Fulton, Alexander T. (Mathematics and Science).....	3,351 30
Gibson (Matriculation).....	3,311 65
Gibson (Pass Matriculation).....	4,455 54
Graduate Fellowships (Sundry).....	2,125 00
Hardie, William (Matriculation).....	2,100 00
Harris, James (Matriculation, University College).....	25,000 00
Hastings (Public Health and Nursing).....	9,980 41
Henderson, Joseph, Memorial (Matriculation).....	2,071 86
Irwin, Herbert W., Memorial (Modern Languages).....	1,036 08
Jenkins (Engineering).....	600 00
Khaki University Memorial.....	2,355 83
Laurier, Sir Wilfred, Memorial.....	2,222 61
Lyle Medal (Orientals).....	512 18
McCaul Medal (Classics).....	510 36
McCaul Scholarship (Classics).....	79 24
McCharles, Aeneas, Bequest.....	15,745 24
McCrea, John (Matriculation).....	11,040 95
McCrea, Dent (Law).....	50 00
Macdonald, John (Philosophy).....	2,080 00
Mackenzie, Alexander, Memorial (Political Science).....	16,642 60
Mackenzie, J. J., Fellowship (Pathology).....	5,369 42
McPhedran, Alexander, Research Fellowship (Medicine).....	26,424 20
Marfleet, Pearson Kirkman, Lectureship.....	6,237 21
Mickle, Charles, Fellowship.....	28,814 62
Mickle, Ellen, Fellowship.....	28,731 83
Moss (Classics).....	2,000 00
Mulock, Mary (Classics).....	2,838 74
Mulock, William (Classics and Mathematics).....	2,000 00
Nesbitt, Wallace, Medals (University Schools).....	500 00
Nipissing Research Fellowship (Mining).....	21,223 12
Ontario Hockey Association, War Memorial (Matriculation).....	2,100 00
Parsons, S. R. (Commerce and Finance).....	250 00
Peters, George A. (Surgery).....	3,400 00
Porter, T. M. (University Schools).....	6,073 70
Porter, T. M. (Corrigan gift), University Schools.....	1,001 67
Prince of Wales (Matriculation).....	950 00
Quebec Bonne Entente Prize (French).....	1,050 00
Ramsay, William (Physics).....	1,087 78
Ramsay, William (Political Economy).....	1,009 42
Reeve, Anna Howe, Prize (Household Science).....	686 21
Reeve, R. A. Prize (Medicine).....	150 00
Richardson, James H., Research Fellowship (Anatomy).....	10,000 00
Rossin, Julius (Modern Languages).....	1,000 00
Social Service Council.....	800 00
Squair French Prose Prize.....	310 00
Starr Bequest (Medals).....	7,019 54
Strang, Hugh Innis, Memorial (Classics).....	2,497 25
Toronto Bankers' Educational Association Prize (Physics).....	13 54
Toronto Brick Company Prize (Architecture).....	100 00
Ubukata (Japanese students).....	11,200 39
Wickett, Morley (Matriculation, English and History).....	2,060 57
Wilson, Daniel (Natural Science).....	2,000 00
Young Memorial (Philosophy).....	5,237 52
Ledger balances on 30th June, 1929.....	\$390,445 56
Return of 30th June, 1928.....	\$340,719 88
Additions to funds during year (including income from investments).....	65,841 58
Interest written to endowments.....	5,853 66
Expended for scholarships, prizes, etc.....	412,415 12 21,969 56
Return of 30th June, 1929.....	\$390,445 56

SCHEDULE 3

RETIREMENT FUND BENEFICIARIES (OLD PLAN)

W. Lash Miller.....	\$23,169 76	
T. L. Walker.....	20,996 38	
W. A. Parks.....	13,422 91	
J. W. Bain.....	11,426 24	
H. W. Price.....	10,114 10	
		\$79,129 39
Fund of 30th June, 1928.....	\$72,411 48	
Contributions, 1928-29.....	3,237 20	
Interest written.....	2,356 03	
Interest derived from bonds.....	1,124 68	
		\$79,129 39
Return of 30th June, 1929.....		\$79,129 39

SCHEDULE 4

TRUST FUNDS

Banting Research Foundation (Subscriptions).....	\$621,658 78	
Carnegie Corporation Research (Physics).....	1,007 76	
Connaught Laboratories Research Fund.....	200,000 00	
Dental Library Fund.....	364 17	
Dental Special Account.....	1,000 00	
Eaton Endowment (Medicine).....	51,802 78	
Fasken, David, Trust.....	3,385 73	
Fulford Estate Donation.....	2,535 51	
Honor, John, Bequest (Arts Faculty).....	7,915 74	
Horton, John Hughes, Bequest (not allocated).....	638 15	
Hoskin, John, Bequest (Residences).....	20,091 17	
Insulin Committee.....	173,285 38	
Langton, John, Memorial.....	30 00	
Library Funds:		
King Alfred Millenary.....	10,188 48	
Phillips Stewart.....	1,700 19	
John Squair (French) No. 1.....	1,000 00	
John Squair (French) No. 2.....	1,347 15	
University Studies.....	3,714 23	
Massey Foundation.....	136,308 02	
Massey-Treble Bequest, Household Science.....	16,053 56	
Medical Research, Banting.....	17,745 06	
Medical Research, Best.....	31,214 43	
Ontario Archaeology Special Fund.....	579 13	
Reeve, R. A., Bequests (not allocated).....	13,046 22	
Rockefeller Fund (Medical Endowment).....	1,058,510 79	
Rockefeller Hygiene Endowment.....	255,060 67	
Rockefeller, Laura Spelman (Child Research).....	450 80	
Rutherford, Dr. James P. (Medical Research).....	5,095 39	
Simpson, Mary A., Bequest.....	162 35	
Simpson Co., Robt.....	600 00	
Stewart, John A., Pernicious Anaemia.....	9,234 27	
Students' Administrative Council.....	2,042 19	
Walker, E. C., Bequest (Residences).....	39,965 73	
Walker, J. Harrington, Bequest (Residences).....	21,977 41	
Whitney, E. C., Bequest.....	393,566 38	
Wintercorbyn, Mrs. E. A., Bequest.....	8,145 74	
Women's Residence.....	50 00	
Sundry Security Deposits:		
Residences.....	2,760 00	
Summer Session.....	1,035 00	
Keys.....	225 00	
Hamilton, R. J.....	1,955 40	
Ledger balances on 30th June, 1929.....		\$3,117,448 76

Return of 30th June, 1928.....	\$2,559,373 40
Additions to funds during year (including income from investments).....	845,149 84
Interest written to endowments.....	22,117 75
	<u>\$3,426,640 99</u>
Expenditures and transfers from funds.....	309,192 23
	<u>\$3,117,448 76</u>

SCHEDULE 5

ANNUITY DEBENTURES

Issue of July, 1909, \$500,000 repayable in forty equal annual amounts of \$25,260 each.	
Value as on 30th June, 1929, of the twenty outstanding instalments.....	\$343,291 40
Issue of January, 1911, under 1 George V, Cap. 80, for construction of Pathological building, \$130,000, repayable in forty equal annual amounts of \$6,568 each.	
Value as on 30th June, 1929, of the twenty-two outstanding instalments.....	94,914 00
Accrued on 30th June, 1929, of nineteenth payment and charged to Revenue, 1928-29.....	3,284 00
Issue of January, 1911, under 1 George V, Cap. 80, as a grant towards construction of Toronto General Hospital, \$300,000, repayable in forty equal annual amounts of \$15,157 each.	
Value as on 30th June, 1929, of the twenty-two outstanding instalments.....	219,0 00
Accrued on 30th June, 1929, of nineteenth payment and charged to Revenue, 1928-29.....	7,578 50
Issue of April, 1915, under R.S.O. 1914, Cap. 279, to provide for the payment of \$100,000 to the Hart A. Massey Estate towards the Gymnasium portion of Hart House, \$110,000, repayable in forty equal annual amounts of \$5,975 each.	
Value as on 30th June, 1929, of the twenty-six outstanding instalments.....	90,501 13
Accrued on 30th June, 1929, of fifteenth payment and charged to Revenue, 1928-29.....	1,244 80
Issue of July, 1924, under R.S.O. 1914, Cap. 279, for construction of Forestry building, \$124,622, repayable in twenty equal annual amounts of \$10,000 each.	
Value as on 30th June, 1929, of the fifteen outstanding instalments.....	103,796 60
Issue of January, 1929, under R.S.O. 1927, Cap. 337, for construction of a new building for Pathology and allied departments, repayable in twenty equal annual amounts of \$64,193 each.	
Value as on 30th June, 1929, of the twenty outstanding instalments.....	800,000 00
Accrued on 30th June, 1929, of first payment and charged to Revenue, 1928-29.....	29,421 80
	<u>\$1,693,064 23</u>

SCHEDULE 6

CONTINGENT FUNDS, ETC.

Contingent Fund (Investment Reserve):	
Balance on 30th June, 1928.....	\$107,747 30
Added thereto, interest on special deposit.....	14,111 89
	<u>\$121,859 19</u>
Organ Fund:	
Balance on 30th June, 1928.....	\$9,331 45
Music fees transferred, and other receipts.....	1,290 00
	<u>\$10,621 45</u>
Expenditure, 1928-29.....	422 76
	<u>10,198 69</u>
University Press:	
At credit of accounts as per Appendix III.....	50,309 14
Ontario College of Education:	
At credit of account (Appendix V).....	22,650 78
Special Grant voted by Legislature for 1928-29.....	\$1,209,143 00
Balance brought forward from 1927-28.....	245,154 09
	<u>\$1,454,297 09</u>

Deficit upon ordinary revenue account for 1928-29 as per Schedule 6a.....	\$1,120,711 51	
Transferred to new Pathological building construction account.....	100,000 00	
	<u>\$1,220,711 51</u>	\$233,585 58
Legislative Grant for Land Purchase Account:		
Balance on 30th June, 1928.....	\$11,264 30	
Addition from revenue.....	13,743 21	
	<u>\$25,007 51</u>	
Expended therefrom in 1928-29.....	16,007 51	9,000 00
Legislative Grant for Administration Building:		
Balance brought forward from 1927-28.....		944 90
Pathological Building (Construction Account):		
Proceeds of University debentures issued for this purpose.....	\$800,000 00	
Transferred from amount at credit of Special Grants from Government.....	100,000 00	
	<u>\$900,000 00</u>	
Expenditure, 1928-29.....	362,017 71	537,982 29
		<u>\$986,530 57</u>
Sundry Ledger Balances (items in suspense):		
Fire insurance premiums paid in advance.....	\$15,935 70	
Workmen's Compensation Board Deposit.....	810 44	
Medical Building, special alterations.....	19,431 67	
		<u>36,177 81</u>
Fire loss, Medical Building.....	\$975 06	
Fire loss, Mining Building.....	264 52	
Fire loss, Connaught Laboratories.....	1,589 68	
Bloor Street widening.....	1,221 76	
Microscopes Purchase Account.....	406 10	
Capital Account Charges.....	12,164 40	
		<u>16,621 52</u>
		<u>19,556 29</u>
		<u>\$966,974 28</u>

SCHEDULE 6a

REVENUE, 1928-29

Receipts

	Estimate	Actual
Legislative Grant, University Act, 1906.....	\$500,000 00	\$500,000 00
Legislative Grant, 60 Vict., Cap. 59.....	7,000 00	7,000 00
Legislative Grant, 13-14 George V.....	10,000 00	10,000 00
Fees, University and College, as detailed in Appendix I.....	520,000 00	562,770 55
Infirmiary Receipts, Dentistry.....	33,500 00	34,059 55
Interest:		
On Purchase Moneys.....		3,099 40
On Loans.....		6,180 91
On Debentures.....		1,615 15
On Government and Railway Bonds.....		23,539 09
On Ontario Government Annuities.....		40,099 15
On Bank Balances.....	105,000 00	2,621 32
Rentals:		
University Park ground leases.....		15,018 34
City of Toronto payment.....		6,000 00
Business properties.....		13,456 50
Sundry houses, etc.....		4,764 47
Sundry Land Earnings.....		217 00
Men's Residence dues:		
(General, \$20,266.40; University College, \$4,170.15).....	24,000 00	24,436 55
Women's Residence dues:		
(Queen's Hall group, \$29,788.04; St. George Street, \$8,598.19; Argyll House, \$4,438.85—).....	44,500 00	42,825 08

University College Women's Union:		
Membership fees.....	\$2,250 00	\$2,674 00
Receipts from rooms and meals.....	26,100 00	24,976 09
Central Power Plant:		
Wycliffe, Victoria and Knox Colleges.....	\$28,456 18	
Royal Ontario Museum.....	4,241 38	
Sundry accounts.....	6,426 75	
	35,000 00	39,124 31
Casual Revenue.....	5,000 00	5,736 62
	\$1,312,350 00	\$1,370,214 08
<i>Expenditures</i>		
Under appropriations as per Appendix II.....	\$2,583,993 00	\$2,445,808 45
Interest written to Scholarship and other funds.....	27,500 00	31,373 93
Transferred to Land Purchase Account to complete purchase of St. George Street property.....		13,743 21
	\$2,611,493 00	\$2,490,925 59
Receipts as above.....	1,312,350 00	1,370,214 08
Expenditures in excess of receipts carried to Schedule 6....	\$1,299,143 00	\$1,120,711 51

SCHEDULE 7

SITE LANDS, BUILDINGS AND CONTENTS

Site Lands:		
2,765,362 sq. feet at forty cents per foot.....	\$1,106,144 80	
269,698 sq. feet at cost price.....	367,935 53	
18,000 sq. feet at estimate.....	40,000 00	
	3,053,060 sq. feet.....	\$1,514,080 33
Buildings:		
Anatomical building.....	\$482,388 37	
Baldwin House.....	12,000 00	
Biological building.....	129,745 30	
Botanical building.....	38,541 71	
Chemical building.....	77,469 88	
Convocation Hall.....	214,866 22	
Dental building.....	350,000 00	
Electrical building.....	346,699 89	
Engineering building.....	50,000 00	
Forestry building.....	122,359 86	
Geodetic Observatory building.....	12,000 27	
Hart House (not appraised).....		
Household Science building.....	455,000 00	
Hygiene and Public Health building.....	417,642 61	
Library building.....	327,425 50	
Mechanical building.....	119,017 21	
Medical building.....	165,000 00	
Men's Residences.....	217,680 04	
Military Studies building.....	8,239 47	
Mining building.....	384,736 89	
Ontario College of Education.....	554,324 09	
Physics building.....	363,945 85	
President's House.....	38,767 62	
Press building.....	1 00	
Psychology building No. 1.....	13,433 26	
Psychology building No. 2.....	8,900 00	
Simcoe Hall.....	399,055 10	
Univerity College building.....	450,000 00	
University College Women's Union.....	70,059 19	
Women's Residences.....	109,677 54	
1 Queen's Park.....	6,075 77	
6 Queen's Park.....	7,228 28	
43 St. George Street, house and land.....	30,054 25	
45 St. George Street, house and land.....	39,079 67	
49 St. George Street, house and land.....	25,007 51	
81 St. George Street, house and land.....	30,323 93	
83 St. George Street, house and land.....	25,287 58	
		\$6,102,023 86

Library.....	\$400,299 18	
General Museum Specimens.....	1 00	
Convocation Hall Organ.....	19,603 11	
		\$419,903 29
Departmental Equipment:		
Anatomy.....	\$1,340 00	
Architecture and Drawing.....	10,830 00	
Astronomy.....	1,635 00	
Biology.....	6,131 25	
Botany.....	5,500 00	
Chemical Engineering and Applied Chemistry.....	10,114 00	
Chemistry.....	14,040 00	
Civil Engineering: Municipal and Structural.....	10,075 00	
Civil Engineering: Surveying and Geodesy.....	12,980 00	
Dentistry.....	85,000 00	
Electrical Engineering.....	30,923 00	
Engineering Physics and Photography.....	4,127 00	
Geology.....	7,505 00	
Household Science.....	19,000 00	
Mathematics.....	500 00	
Mechanical Engineering.....	10,000 00	
Mechanics.....	750 00	
Mineralogy.....	10,145 00	
Mining.....	16,270 00	
Ontario College of Education.....	35,042 44	
Pathology.....	18,440 56	
Pathological Chemistry.....	7,925 74	
Pharmacology.....	2,430 00	
Physics.....	29,250 00	
Physiology.....	12,500 00	
Psychology.....	2,700 00	
		375,153 99
Furniture and Furnishings:		
Men's Residences.....	\$18,715 89	
Women's Residences.....	3,983 10	
University College Women's Union.....	10,950 00	
University College and other buildings—general furniture.....	11,938 90	
		45,586 99
Arena.....		223,070 40
Athletic Field Stadium and equipment.....		11,817 88
Gymnasium equipment.....		7,620 19
Dining Hall equipment.....		1 00
Printing Plant.....		1 00
Connaught Laboratories (Farm, buildings and equipment.....		80,000 00
Connaught Laboratories (Medical Building plant).....		1 00
Central Power Plant.....		52,266 93
Surveying Practice Camp, Lutterworth Township (land, \$1,250; buildings, etc., \$10,000).....		11,250 00
Aura Lee Grounds and equipment (Ontario College of Education).....		17,276 27
		\$8,860,053 13

Return of 30th June, 1928.....	\$8,978,085 15	
Additions thereto:		
Lot 22, University Park, restored to Site Lands.....	11,462 00	
Botanical building, new greenhouse.....	8,440 06	
49 St. George Street, purchased for.....	25,007 51	
Library proper:		
Value of additions for 1928-29 as reported by the Librarian.....	\$39,892 78	
Less depreciation at 3 per cent. on \$412,679.57..	12,380 39	
		27,512 39
		\$9,050,507 11

Contra

Central Power Plant:		
Repayment from Revenue for 1928-29.....	\$20,208 00	
Valuations written off General Endowments Fund as per Schedule I:		
Part Lot 13.....	334 80	
Old Pathological building.....	169,694 38	

Women's Residences Furniture written off by application of credit from Sale of Wild Lands set apart for Women's Residences.....	\$216 80	
		<u>\$190,453 98</u>
Return of 30th June, 1929.....		<u>\$8,860,053 13</u>

SCHEDULE 8

UNPRODUCTIVE LANDS

Vacant land in Port Hope.....	\$8,045 00	
Endowment lands unsold in various townships.....	152 00	
U.C.C. block on King Street.....	50,377 87	
		<u>\$58,574 87</u>

TRANSACTIONS, 1928-29

Local Improvement taxes and repairs to fencing, U.C.C. block.....	\$69 24	
Return of 30th June, 1928.....	58,505 63	
		<u>\$58,574 87</u>

SCHEDULE 9

LEASED PROPERTIES

Land leased to City of Toronto.....	\$120,000 00	
Park lots leased.....	283,455 40	
Toronto business properties.....	283,000 00	
House and land, 47 St. George Street.....	10,172 95	
Building, No. 719 Spadina Avenue.....	4,000 00	
Building, No. 721 Spadina Avenue.....	4,023 51	
Caradoc Farm.....	3,000 00	
		<u>\$707,651 86</u>
Rentals and City of Toronto payment accrued.....		9,123 29
Rentals past due.....		744 00
		<u>\$717,519 15</u>
Return of 30th June, 1928.....	\$726,020 15	
Increase in capitalized value of park leases as per Schedule I.....	45,000 00	
		<u>\$771,020 15</u>

Contra

York Street Property, now sold.....	\$27,000 00	
Valuations of leased lots written off upon surrender (Schedule I.)....	25,600 00	
Decrease in rentals, etc., outstanding.....	901 00	
		<u>53,501 00</u>
Return of 30th June, 1929.....		<u>\$717,519 15</u>

SCHEDULE 10

INVESTMENTS, CASH AND ACCOUNTS RECEIVABLE

Dominion and Province of Ontario bonds.....	\$1,819,981 71	
Interest accrued.....	3,716 77	
Interest outstanding on purchases.....	4,520 55	
		<u>\$1,828,219 03</u>
Dominion and Provincial Railway Bonds (guaranteed).....	\$313,107 07	
Interest accrued.....	2,904 84	
		<u>316,011 91</u>
Municipal and other debentures.....	\$229,680 47	
Interest accrued.....	596 34	
		<u>230,276 81</u>
University of Toronto debentures (guaranteed).....		800,000 00
Unpaid purchase money upon land sales.....	\$75,900 00	
Interest accrued.....	622 32	
		<u>76,522 32</u>

Dominion Power and Transmission Company stock		\$2,000 00
Consumers' Gas Company stock		1,000 00
Investments in trust for Banting Research Foundation		620,913 00
Loan to Athletic Association		130,000 00
Advances to Royal Ontario Museum:		
For share of salaries and expenses for the year 1928-29 payable by the Provincial Government	40,474 85	
Less Museum Special Accounts at credit	7,790 83	
		32,684 02
Accounts Receivable:		
University Press	\$10,807 55	
University Studies	24 16	
Department of Photography	183 25	
Miscellaneous labour and material	6,009 79	
		17,024 75
Central Power Plant:		
Victoria College Account	\$14,265 93	
Wycliffe College Account	5,416 89	
Knox College Account	8,773 36	
		28,456 18
Canadian Bank of Commerce, on deposit		992,694 95
		<u>\$5,075,802 97</u>

TRANSACTIONS, 1928-29

Inwards

Dominion and Provincial Bonds	\$814,623 89	
Municipal debentures	915 47	
Mortgage loans	6,121 22	
Purchase moneys, land sales	21,100 00	
Athletic Association and Students' Administrative Council loan repayments	27,639 94	
Withdrawals from Canadian Bank of Commerce	4,125,921 20	
		<u>\$4,996,321 72</u>

Outwards

Dominion and Provincial bonds	\$880,196 49	
Municipal debentures	142,824 15	
University of Toronto debentures	800,000 00	
Purchase moneys, land sales	95,000 00	
Consumers' Gas Company stock	1,000 00	
Banting Research Foundation investments	20,978 10	
Deposits in Canadian Bank of Commerce	4,407,064 83	
Increase in accrued revenue	1,135 37	
Increase in accounts outstanding	5,619 58	
		<u>\$6,353,828 52</u>

		\$1,357,506 80
Return of 30th June, 1928		3,718,296 17
Return of 30th June, 1929		<u>\$5,075,802 97</u>

APPENDIX I

FEES, 1928-29

Balance brought forward from 1927-28	\$495 00
Total of fees collected, 1928-29	681,401 92
	<u>\$681,896 92</u>

Distribution thereof:

Sundry refunds during year	\$3,430 50
Share of fees paid to the following:	
Hart House	29,914 00
Men's Students Administrative Council	8,691 00
Women's Students Administrative Council	4,886 00
Medical Society	1,346 00
Graduate Students Union	276 00
University College Literary and Athletic Society	1,431 00

University College Women's Undergraduate Association		549 00	
Medical Women's Undergraduate Association		137 00	
Royal College of Dental Surgeons			2,240 00
Victoria College	} Household Science	\$1,297 50	
Trinity College		145 00	
St. Michael's College		75 00	
			<u>1,517 50</u>
Hospitals:			
Toronto General	\$5,055 00		
Toronto General (Burnside)	824 00		
		<u>\$5,879 00</u>	
St. Michael's		1,580 00	
Sick Children's		1,235 00	
Toronto Western		910 00	
			<u>9,604 00</u>
Credited to Sundry Accounts:			
Ontario College of Education			37,724 37
Students' Administrative Council, Special Account			4,581 00
University College Women's Union			2,674 00
Organ Fund			1,200 00
Microscopes Account			8,195 00
Fees paid in advance for 1929-30			730 00
Balance to Revenue Account (Schedule 6a)			562,770 55
			<u>\$681,896 92</u>

DETAILS OF FEES RECEIVED

	Arts	Medicine	Applies Science	Dentistry	Education and Pedagogy	Forestry	Music	Household Science	Post-Graduate	Total
General tuition.....	\$117,020 00	\$131,236 95	\$112,569 00	\$44,449 00	\$8,872 00	\$7,517 00		\$11,804 00	\$2,208 00	\$435,675 95
Library School.....				854 00	854 00					854 00
University Schools.....					27,134 37					27,134 37
Registration.....				95 00	355 00		\$150 00		1,290 00	1,890 00
Matriculation.....	1,764 60	5 00		25 00			40 00			1,834 60
Ad Eundem.....	130 00	120 00	80 00	90 00				80 00		500 00
Examinations.....	25,214 00	8,312 50	7,904 00	2,610 00	593 00	790 00	1,555 00	2,200 00	1,210 00	50,388 50
Degrees and honour certificates.....	1,741 00	5,788 00	1,000 00	610 00	460 00	100 00	70 00	301 00	1,195 00	14,265 00
Laboratory supplies.....	4,209 00									4,209 00
Library.....	4,728 00	1,450 00	1,198 00	452 00		132 00		332 00	2 00	8,294 00
Women's Athletics.....	1,707 00	72 00			531 00		12 00	296 00	8 00	2,626 00
Physical training.....	4,480 00	780 00	1,785 00	220 00		185 00				7,450 00
Women's Union.....	2,349 00	72 00						228 00	25 00	2,674 00
Women's Undergraduate Association.....	549 00	137 00								686 00
Penalties (University).....	1,020 00	882 00	405 00	273 00		34 00	19 00	71 00		2,704 00
Penalties (Univ. Coll.).....	896 00									896 00
Hart House.....	13,748 00	6,274 00	5,976 00	2,242 00	1,010 00	642 00	10 00		12 00	29,914 00
Men's Student Adm. Council.....	5,460 00	2,384 00	2,200 00	884 00	323 00	264 00				11,515 00
Women's Student Adm. Council.....	4,888 00	282 00	12 00	12 00	624 00			672 00		6,490 00
Literary and Athletic Society.....	1,431 00									1,431 00
Medical Society.....		1,348 00								1,348 00
Microscopes.....		8,080 00		180 00						8,260 00
Graduate Students' Union.....									276 00	276 00
Totals.....	\$194,334 60	\$167,223 45	\$133,129 00	\$52,142 00	\$40,756 37	\$9,664 00	\$1,856 00	\$15,984 00	\$6,226 00	\$621,315 42

DETAILS OF FEES RECEIVED—Continued

	University Extension	Social Service	Public Health Nursing	Law	Pharmacy	Veterinary Science	Agriculture	Total
Tuition.....		\$2,252 50	\$3,082 00		\$11,090 00			\$16,424 50
Summer Session:								
Tuition (\$4,734 of which \$475 was paid in 1927-28).....	\$4,259 00							4,259 00
Tuition (in advance for 1929-30).....	730 00							730 00
Specialists.....	320 00							320 00
Specialists, in advance for 1929-30.....	40 00							40 00
Correspondence courses.....	5,419 50							5,419 50
Teachers' courses.....	7,668 50							7,668 50
Occupational Therapy.....	5,421 00							5,421 00
Graduate Nurses.....	2,111 00							2,111 00
Tutorial courses.....	6,790 50							6,790 50
Extension lectures.....	1,873 50							1,873 50
Workers' Educational Association.....	300 00							300 00
Pupil Nurses.....	815 00				600 00			815 00
Registration.....								600 00
Ad Eundem.....	30 00							30 00
Matriculation.....				70 00				70 00
Examinations.....	2,438 50	90 00	36 00	170 00	1,874 50		\$330 00	4,939 00
Degrees.....				180 00	1,070 00	\$205 00	330 00	1,785 00
Library.....	4 00		44 00					48 00
Penalties.....	241 00	9 00	4 00	6 00	19 00			279 00
Women's Students Council.....		153 00						153 00
Hart House.....		10 00						10 00
	\$38,461 50	\$2,514 50	\$3,166 00	\$426 00	\$14,653 50	\$205 00	\$660 00	\$60,086 50

CLASSIFICATION OF SERVICES

	Gross Receipts	Refunds	Other Deductions	Net Amount
Tuition, etc.				
Arts	\$117,020 00	\$882 50		\$116,137 50
Medicine	131,236 95	20 00	\$9,604 00	121,612 95
Applied Science	112,569 00	480 00		112,089 00
Dentistry	44,544 00	55 00	2,240 00	42,249 00
Education	10,081 00	45 00	10,036 00	
Education, University Schools	27,134 37	39 00	27,095 37	
Forestry	7,517 00			7,517 00
Music	150 00			150 00
Household Science	11,804 00	30 00	1,517 50	10,256 50
Post Graduate Studies	3,498 00	18 00		3,480 00
University Extension	35,758 00	864 50		34,883 50
Social Service	2,252 50	9 00		2,243 50
Public Health Nursing	3,082 00			3,082 00
Pharmacy	11,690 00			11,690 00
Matriculation	1,904 60			1,904 60
Ad Eundem	530 00			530 00
Examinations	55,327 50	384 00	1,793 00	53,150 50
Degrees and Honour Certificates	16,050 00	173 00		15,877 00
Laboratory Supplies	4,209 00	3 00		4,206 00
Library	8,342 00	10 00		8,332 00
Women's Athletics	2,626 00	36 00		2,590 00
Physical Training	7,450 00	10 00		7,440 00
Women's Union	2,674 00		2,674 00	
Women's Undergraduate Association, University College	549 00		549 00	
Women's Undergraduate Association, Medicine	137 00		137 00	
Penalties	3,879 00	294 50		3,584 50
Hart House	29,924 00	10 00	29,214 00	
Men's Students Council	11,515 00		11,515 00	
Women's Students Council	6,643 00		6,643 00	
Literary and Athletic Society	1,431 00		1,431 00	
Medical Society	1,348 00	2 00	1,346 00	
Graduate Students Union	276 00		276 00	
Microscopes	8,260 00	65 00	8,915 00	
	\$681,401 92	\$3,430 50	\$114,965 87	\$563,005 55

RECAPITULATION

University Fees proper	\$578,292 92	\$2,453 00	\$114,965 87	\$480,874 05
University College Fees proper	103,109 00	977 50		102,131 50
Balance brought forward from 1927-28	495 00			495 00
	\$681,896 92	\$3,430 50	\$114,965 87	\$563,500 55
Less paid in advance for 1929-30				730 00
				\$562,750 55

APPENDIX II

REVENUE EXPENDITURES, 1928-29

	Appropriation	Supplementary	Unused	Total
I. Administration:				
1. Salaries.....	\$95,655 00		\$138 50	\$95,516 50
2. Pensions and Retiring Allowances..	20,663 00	\$4,766 92		25,429 92
3. President's Office.....	750 00		12 23	737 77
4. Bursar's Office.....	3,650 00		366 56	3,283 44
5. Registrar's Office.....	8,800 00	3,360 89		12,160 89
6. Superintendent's Office.....	3,250 00		34 17	3,215 83
7. Convocation Hall and Simcoe Hall.	14,275 00		1,754 86	12,520 14
8. President's House.....	1,100 00		459 61	640 39
	\$148,143 00	\$8,127 81	\$2,765 93	\$153,504 88
II. Library and University Studies:				
9. Salaries.....	\$47,700 00	\$77 65		\$77,777 65
10. Library Building and Department..	50,750 00	\$213 32		50,963 32
11. University Studies.....	3,000 00			3,000 00
	\$101,450 00	\$290 97		\$101,740 97
III. 12. Royal Ontario Museum.....				
	\$41,000 00		\$525 15	\$40,474 85
IV. Athletics, Physical Training, Military Studies, etc.:				
13. Athletics and Physical Training—Men.....	\$29,500 00	\$185 43		\$29,685 43
14. Athletics and Physical Training—Women.....	5,950 00		\$108 87	5,841 13
15. Health Service—Men.....	7,550 00		159 78	7,390 22
16. Health Service—Women.....	7,430 00		615 64	6,814 36
17. Military Studies.....	5,290 00		561 23	4,728 77
	\$55,720 00	\$185 43	\$1,445 52	\$54,459 91
V. Faculty of Arts:				
18. Salaries.....	\$626,185 00		\$13,930 57	\$612,254 43
19. Biological Building and Department	10,900 00		619 99	10,280 01
20. Botanical Building and Department	28,925 00		6,837 01	22,087 99
21. Chemical Building and Department	15,200 00		582 83	14,617 17
22. Physics Building and Department..	17,850 00		673 48	17,176 52
23. Astronomy.....	650 00		110 60	539 40
24. Geological Department.....	1,300 00		137 71	1,162 29
25. Mineralogical Department.....	1,000 00	\$510 43		1,510 43
26. Philosophy and Psychology.....	6,275 00		971 61	5,303 39
27. Mathematical Department.....	650 00		631 40	18 60
28. Mechanics.....	400 00		108 60	291 40
29. Political Economy and History....	12,540 00		2,255 12	10,284 88
30. Ethnology and Anthropology.....	210 00	123 80		333 80
31. Italian and Spanish.....	75 00		39 40	35 60
32. History of Industrial Art.....	100 00	90 26		190 26
33. University College Building.....	13,500 00		1,925 13	11,574 87
34. University College Departments....	825 00		344 22	480 78
35. University College General Expenses	1,900 00		17 09	1,882 91
	\$738,485 00	\$724 49	\$29,184 76	\$710,024 73

REVENUE EXPENDITURES, 1928-29—Continued

	Appropriation	Supplementary	Unused	Eaton and Rockefeller Funds	Total
VI. Faculty of Medicine:					
36. Salaries.....	\$212,910 00		\$6,334 84	\$80,011 66	\$286,586 82
37. Anatomy.....	5,920 00		679 63		5,240 37
38. Pathology and Bacteriology.....	5,500 00		313 61		5,186 39
39. Pathological Chemistry.....	3,100 00		565 77		2,534 23
40. Pharmacy and Pharmacology.....	2,550 00		115 95		2,434 05
41. Bio-Chemistry.....	3,000 00		20 86		2,979 14
41. Physiology.....	3,650 00	\$1,950 06			5,600 06
43. Hygiene and Preventive Medicine.....	600 00	188 38			788 38
44. Medicine.....	1,460 00		420 51	2,447 44	3,486 93
45. Surgery.....				586 07	586 07
46. Obstetrics and Gynaecology.....	500 00	5 03			505 03
47. Ophthalmology.....	500 00		16 47		483 53
48. Oto-Laryngology.....	500 00		116 57		383 43
49. Therapeutics.....	50 00		22 65		27 35
50. Psychiatry.....	300 00		300 00		
51. Medical Jurisprudence.....					
52. Radiology.....	250 00				250 00
53. Medical Building.....	18,750 00		958 94		17,791 06
54. Pathological Building (including Lecture Room, Tor. General Hospital).....	10,950 00		1,668 78		9,281 22
55. Anatomical Building.....	5,525 00		806 92		4,718 08
56. General Expenses.....	6,000 00		713 74	491 94	5,778 20
57. Post-Graduate Courses.....	2,800 00		1,993 95		806 05
58. School of Hygiene.....	6,950 00		664 39	9,671 27	15,956 88
	\$291,765 00	\$2,143 47	\$15,713 58	\$93,208 38	\$371,403 27

	Appropriation	Supplementary	Unused	Total
VII. Faculty of Applied Science:				
59. Salaries.....	\$259,175 00		\$4,628 65	\$254,546 35
60. Mining Building.....	9,850 00		489 83	9,360 17
61. Engineering Building.....	5,950 00		315 69	5,634 41
62. Electrical Building (including Mechanical Building and Wind Tunnel).....	8,325 00		1,033 80	7,291 20
63. Geodetic Observatory Building.....	580 00		90 06	489 94
64. Electrical Engineering.....	4,900 00		117 24	4,782 76
65. Mechanical Engineering.....	6,950 00		432 13	6,517 87
66. Civil Engineering (Municipal and Structural).....	2,000 00		371 01	1,628 99
67. Civil Engineering (Surveying and Geodesy).....	4,525 00		104 40	4,420 60
68. Mining Engineering.....	3,850 00		17 46	3,832 54
69. Metallurgical Engineering.....	1,690 00	\$24 84		1,714 84
70. Chemical Engineering and Applied Chemistry.....	6,500 00		578 90	5,921 10
71. Architecture.....	1,275 00		56 78	1,218 22
72. Engineering Drawing.....	1,000 00		170 82	829 18
73. Engineering Physics and Photography.....	4,600 00		111 99	4,488 01
74. General Expenses.....	4,050 00		1,079 31	2,970 69
	\$325,220 00	\$24 84	\$9,598 07	\$315,646 77

REVENUE EXPENDITURES, 1928-29—Continued

	Appropriation	Supplementary	Unused	Total
VIII. Faculty of Dentistry:				
75. Salaries.....	\$87,562 00		\$1,083 67	\$86,478 33
76. Laboratory and Infirmary Supplies, etc.....	23,000 00		101 06	22,898 94
77. General Expenses.....	3,200 00		94 31	3,115 69
78. Dental Building Maintenance.....	15,450 00		931 85	14,518 15
	\$129,212 00		\$2,200 89	\$127,011 11
IX. Faculty of Household Science:				
79. Salaries.....	\$24,900 00		\$750 00	\$24,150 00
80. Household Science Building and Department.....	12,700 00		301 54	12,398 46
	\$37,600 00		\$1,051 54	\$36,548 46
X. Faculty of Forestry:				
81. Salaries.....	\$21,050 00		\$112 50	\$20,937 50
82. Forestry Building and Department..	7,230 00		803 05	6,426 95
	\$28,280 00		\$915 55	\$27,364 45
XI. Faculty of Music:				
83. Salaries.....	\$1,250 00		\$250 00	\$1,000 00
84. Maintenance of Department.....	350 00		270 25	79 75
	\$1,600 00		\$520 25	\$1,079 75
XII. School of Graduate Studies:				
85. Salaries.....	\$2,050 00			\$2,050 00
86. Maintenance of Department.....	500 00		\$66 78	433 22
	\$2,550 00		\$66 78	\$2,483 22
XIII. Public Health Nursing:				
87. Salaries.....	\$7,500 00		\$50 00	\$7,450 00
88. Maintenance of Department.....	1,100 00		232 03	867 97
	\$8,600 00		\$282 03	\$8,317 97
XIV. Social Service:				
89. Salaries.....	\$10,550 00	\$825 00		\$11,375 00
90. Social Service Building and Department.....	3,285 00		\$436 90	2,848 10
	\$13,835 00	\$825 00	\$436 90	\$14,223 10
XV. 91. Examinations.....	\$20,000 00		\$1,252 62	\$18,747 38
XVI. University Extension and Publicity:				
92. Salaries.....	\$13,000 00		\$341 67	\$12,658 33
93. Extension and Publicity Departments.....	42,450 00		4,270 67	38,179 33
	\$55,450 00		\$4,612 34	\$50,837 66
XVII. Residences and Women's Union:				
94. Men's Residences.....	\$17,575 00		\$3,186 24	\$14,388 76
95. Women's Residences.....	42,815 00		5,923 47	36,891 53
96. University College Women's Union..	32,695 00		2,091 43	30,603 57
	\$93,085 00		\$11,201 14	\$81,883 86
XVIII. 97. Central Power Plant.....	\$119,900 00		\$10,727 95	\$109,172 05

REVENUE EXPENDITURES, 1928-29—Continued

	Appropriation	Supplementary	Unused	Total
XIX. Miscellaneous and General:				
98. Grounds.....	\$26,600 00		\$137 68	\$26,462 32
99. Protective Service.....	14,100 00		785 69	13,314 31
100. Telephones.....	9,800 00		1,020 46	8,779 54
101. Insurance.....	20,000 00		2,038 65	17,961 35
102. Law Costs.....	2,000 00	\$2,502 63		4,502 63
103. Auditor's Fees.....	2,500 00		325 00	2,175 00
104. Travelling Expenses.....	6,800 00		627 43	6,172 57
105. Receptions to Societies and University Visitors.....	4,000 00		1,220 68	2,779 32
106. Convocation Expenses.....	3,500 00		128 15	3,371 95
107. Aid to Publications and Societies.....	4,150 00		563 68	3,586 32
108. Senate Elections.....	3,350 00		3,289 41	60 59
109. Contingencies.....	20,000 00		2,525 83	17,474 17
	\$116,800 00	\$2,502 63	\$12,662 66	\$106,639 97
XX. 110. Capital Account Charges.....	\$151,898 00		\$46,808 20	\$105,089 80
XXI. 111.) Special Research (including 112.) Banting and Best).....	\$103,400 00		\$1,037 33	\$102,362 67

RECAPITULATION

	Appropriation	Supplementary	Unused	Eaton and Rockefeller Funds	Total
I. Administration.....	\$148,143 00	\$8,127 81	\$2,765 93	.....	\$153,504 88
II. Library and University Studies.....	101,450 00	290 97	.....	.....	101,740 97
III. Royal Ontario Museum.....	41,000 00	.....	525 15	.....	40,474 85
IV. Athletics, Physical Training, Military Studies, etc.....	55,720 00	185 43	1,445 52	.....	54,459 91
V. Faculty of Arts, University and University College....	738,485 00	724 49	29,184 76	.....	710,024 73
VI. Faculty of Medicine..	291,765 00	2,143 47	15,713 58	\$93,208 38	371,403 27
VII. Faculty of Applied Science.....	325,220 00	24 84	9,598 07	.....	315,646 77
VIII. Faculty of Dentistry..	129,212 00	.....	2,200 89	.....	127,011 11
IX. Faculty of Household Science.....	37,600 00	.....	1,051 54	.....	36,548 46
X. Faculty of Forestry..	28,280 00	.....	915 55	.....	27,364 45
XI. Faculty of Music....	1,600 00	.....	520 25	.....	1,079 75
XII. School of Graduate Studies.....	2,550 00	.....	66 78	.....	2,483 22
XIII. Public Health Nursing.....	8,600 00	.....	282 03	.....	8,317 97
XIV. Social Service.....	13,835 00	825 00	436 90	.....	14,223 10
XV. Examinations.....	20,000 00	.....	1,252 62	.....	18,747 38
XVI. University Extension and Publicity.....	55,450 00	.....	4,612 34	.....	50,837 66
XVII. Residences and Women's Union.....	93,085 00	.....	11,201 14	.....	81,883 86
XVIII. Central Power Plant..	119,900 00	.....	10,727 95	.....	109,172 05
XIX. Miscellaneous and General.....	116,800 00	2,502 63	12,662 66	.....	106,639 97
XX. Capital Account Charges.....	151,898 00	.....	46,808 20	.....	105,089 80
XXI. Special Research....	103,400 00	.....	1,037 33	.....	102,362 67
	\$2,583,993 00	\$14,824 64	\$153,009 19 14,824 64	\$93,208 38	\$2,539,016 83
	138,184 55		138,184 55		
Charged to Revenue.....	\$2,445,808 45				
Charged to Eaton and Rockefeller Funds.....	93,208 38				
Total expenditure as above...	\$2,539,016 83				

Sixty-Second Annual Report

OF THE

Inspector of Prisons and Public Charities

UPON THE

Prisons and Reformatories

OF THE

PROVINCE OF ONTARIO

BEING FOR THE YEAR ENDING 31st OCTOBER

1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 10, 1930



ONTARIO

TORONTO:

Printed and Published by Herbert H. Ball, Printer to the King's Most Excellent Majesty
1930

INTRODUCTION

I have the honour of submitting herewith the Sixty-second Annual Report upon the Prisons and Reformatories of the Province of Ontario, for the fiscal year ending 30th September, 1929. I also present the report of the Ontario Board of Parole for the year ending October 31st, 1929.

It will be noted that the statistics covering the movements of the population of the gaols is given in tables entirely separate from that of the reformatories, and both sets of tables are summarized, in a comparative way on the first pages of the report.

In view of the complete information presented in the tables comprising this report, further comment is unnecessary.

A. L. MCPHERSON,
*Inspector of Prisons and
Public Charities.*

H. M. ROBBINS,
Deputy Provincial Secretary.

Sixty-Second Annual Report

UPON THE

Gaols in Ontario

The following statistics have been selected from the ensuing tables as being of special interest:—

(1) Number of gaols in Ontario.....	47
(2) Total expenditure for gaol maintenance in Ontario:	
In 1928.....	\$387,621 21
In 1929.....	409,896 95
	<hr/>
Increase.....	\$22,275 74

Twenty-eight out of the total number of 47 gaols showed an increase in expenditure over the previous year.

(3) The cash revenue from gaol labour during 1929 was \$2,519.59 and was earned at Kingston and Ottawa.

Average maintenance cost per day per prisoner.....	51 cents
Average dietary cost per day per prisoner.....	18 cents

(4) Number of persons committed during the past two years:	
In 1928.....	23,786
In 1929.....	25,980

 Increase..... 2,194

Commitments for murder in 1928.....	37
Commitments for murder in 1929.....	27

 Decrease..... 10

Commitments for manslaughter in 1928.....	40
Commitments for manslaughter in 1929.....	55

 Increase..... 15

Commitments for crime against the person:	
In 1928.....	786
In 1929.....	903

 Increase..... 117

Commitments for crime against property:	
In 1928.....	5,427
In 1929.....	5,539

 Increase..... 112

Commitments for crime against public morals and decency:	
In 1928.....	701
In 1929..	610
	<hr/>
Decrease.....	91

Commitments for crime against public order and peace:	
In 1928.....	14,735
In 1929.....	17,086
	<hr/>
Increase.....	2,351

Commitments for insanity:	
In 1928.....	341
In 1929.....	390
	<hr/>
Increase.....	49

Number of prisoners sentenced:	
In 1928.....	16,358
In 1929.....	17,626
	<hr/>
Increase.....	1,268

Number of days' stay of prisoners:	
In 1928.....	390,891
In 1929.....	393,752
	<hr/>
Increase.....	2,861

Escapes and captures:		
	Escaped	Captured
In 1928.....	17	11
In 1929.....	15	12

Deaths in gaols:	
In 1928.....	19
In 1929.....	3

COMMON GAOLS

The following table shows the number of prisoners committed to the Common Gaols in the Province in each year, from 1st October, 1913, to 30th September, 1929.

Date of Commitment	Men over 16 years of age.	Boys under 16 years of age.	Women over 16 years of age.	Girls under 16 years of age.	Totals.
Commitments for the year ending 30th September, 1913	17,442	85	1,713	10	19,250
“ “ “ 1914	21,024	84	1,665	4	22,777
“ “ “ 1915	18,566	90	1,669	12	20,337
“ “ “ 1916	14,506	80	1,502	12	16,100
“ “ “ 1917	11,417	142	878	8	12,445
“ “ “ 1918	12,182	136	914	10	13,242
“ “ “ 1919	12,034	183	872	7	13,096
“ “ “ 1920	13,759	106	882	9	14,756
“ “ “ 1921	16,526	93	1,168	13	16,800
“ “ “ 1922	13,360	126	1,300	14	14,800
“ “ “ 1923	12,766	80	1,135	14	13,995
“ “ “ 1924	14,564	78	1,211	26	15,879
“ “ “ 1925	16,343	98	1,567	15	18,023
“ “ “ 1926	16,502	62	1,460	9	18,033
“ “ “ 1927	19,564	110	884	20	20,578
“ “ “ 1928	22,047	89	1,638	12	23,786
“ “ “ 1929	24,285	123	1,695	17	25,980

The disposition made of the persons committed to the Gaols of the Province is set forth in the table printed below:

Acquitted on being brought to trial, and discharged.....	1928	1929
Discharged without trial by order of judges, magistrates and courts, including remand cases.....	2,735	3,976
Detained for want of sureties to keep the peace.....	2,147	2,131
Detained as witnesses.....	7	11
Detained as fraudulent debtors.....	41	23
Detained as lunatics, idiots and persons unsafe to be at large.....	91	121
Died before trial.....	335	353
Detained by civil processes other than above.....	3	3
Waiting trial and otherwise detained on 30th September, 1929.....	122	147
Found guilty and sentenced.....	291	274
Discharged under suspended sentence.....	16,358	17,621
	1,656	1,320
Total number of commitments.....	23,786	25,980

The places of confinement to which the convicted persons were sentenced are set forth in the following statement, and similar information is given as regards the sentenced prisoners of the previous year:

Sentenced to Kingston Penitentiary.....	1928	1929
“ to the Industrial School.....	351	314
“ direct to the Ontario Reformatory.....	32	117
“ to the Common Gaols and subsequently transferred to the Ontario Reformatory.....	3,046	1,239
“ direct to the Reformatory for Females.....	3,897	5,329
“ to the Common Gaols and subsequently transferred to the Reformatory for Females.....	191	135
“ to the Common Gaols and there detained until the expiration of sentence.....	99	96
Died while undergoing sentence.....	8,678	10,296
Sentenced elsewhere.....	9	11
	55	89
	16,358	17,626

The following table shows the period of sentence passed on the convicted prisoners:

PERIODS OF SENTENCE		
	1928	1929
For periods under thirty days.....	5,439	6,100
For thirty days and up to sixty days or two months, not including the last term	4,306	4,984
For sixty days, or two months.....	1,602	1,462
Over two months to three months.....	1,456	1,636
Over three months to four months.....	530	357
Over four months to five months.....	149	68
Over five months to six months.....	833	831
Over six months to nine months.....	200	223
Over nine months up to one year, inclusive.....	441	307
Over one year and up to two years.....	923	880
Over two years and up to three years in the Penitentiary.....	194	214
Over three years in the Penitentiary.....	129	136
For periods of any length in the Industrial Schools.....	301	372
Sentenced to death and executed.....	1	4
Sentenced to death and commuted to imprisonment.....	1	3
Sentenced to imprisonment with corporal punishment.....	45	49
	<u>16,358</u>	<u>17,626</u>

The following table shows the sex, social conditions, habits, and educational status of all prisoners committed:

SEX		
	1928	1929
Male.....	22,097	24,285
Female.....	1,689	1,695
	<u>23,786</u>	<u>25,980</u>
SOCIAL CONDITIONS		
Married.....	9,102	10,415
Unmarried.....	14,684	15,565
	<u>23,786</u>	<u>25,980</u>
HABITS		
Temperate.....	9,091	8,994
Intemperate.....	14,695	16,986
	<u>23,786</u>	<u>25,980</u>
EDUCATIONAL STATUS		
Could read and write.....	21,714	23,566
Could neither read nor write.....	2,072	2,414
	<u>23,786</u>	<u>25,980</u>

The following table shows the nationality and religion of all prisoners committed.

NATIONALITY		
	1928	1929
Canadian-born.....	13,620	16,776
English.....	1,799	2,288
Irish.....	928	921
Scotch.....	996	1,217
United States.....	1,188	1,254
Other countries.....	5,255	3,524
	<u>23,786</u>	<u>25,980</u>
RELIGIOUS DENOMINATIONS		
Roman Catholic.....	9,763	10,410
English Church.....	3,731	4,426
Presbyterian.....	2,766	2,832
United.....	2,804	2,859
Other denominations.....	4,722	5,453
	<u>23,786</u>	<u>25,980</u>

The number of prisoners confined in the various custodial institutions of the Province at the close of the past official year, and the preceding year, is exhibited in the following summary:

Common Gaols.....	1,013	1,140
Reformatory for Females (Mercer).....	188	162
Dominion Penitentiary, Kingston.....	770	666
Industrial Farm, Burwash.....	312	429
Industrial Farm, Fort William.....	81	53
Industrial Farm, Langstaff (men).....	290	291
Industrial Farm, Concord (women).....	39	30
Ontario Reformatory, Clay Plant, Mimico.....	145	155
Ontario Reformatory, Guelph.....	535	507
	3,373	3,433

The following is a classification of the offences committed and shows the number of persons committed and sentenced:

I. CRIMES AGAINST THE PERSON

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Abortion.....	2	5	7	.....	3	3
Assault, common.....	533	17	550	326	7	333
Assault, felonious.....	128	7	135	82	1	83
Cutting and wounding, stabbing and shooting with intent.....	25	.....	25	14	.....	14
Rape and assault with intent.....	58	.....	58	35	.....	35
Murder.....	26	1	27	8	.....	8
Manslaughter.....	55	.....	55	25	.....	25
Attempted suicide.....	39	7	46	23	2	25
	866	37	903	513	13	526

II. CRIMES AGAINST PROPERTY

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Arson and incendiarism.....	18	3	21	9	3	12
Burglary.....	443	6	449	269	1	270
Counterfeiting and passing counterfeit money.....	2	.....	2	2	.....	2
Destroying and injuring property.....	74	1	75	41	.....	41
Embezzlement.....	8	.....	8	5	.....	5
Forgery.....	162	2	164	105	2	107
Fraud and obtaining money and goods under false pretences.....	699	24	723	386	8	394
Horse, cattle and sheep stealing.....	28	.....	28	13	.....	13
Housebreaking and robbery.....	601	1	602	385	4	389
Larceny.....	2,328	93	2,421	1,749	58	1,807
Receiving stolen goods.....	75	6	81	60	2	62
Trespass.....	962	3	965	862	2	864
	5,400	139	5,539	3,886	80	3,966

III. CRIMES AGAINST PUBLIC MORALS AND DECENCY

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Bigamy.....	29	3	32	11	2	13
Inmates and frequenters of houses of ill-fame.....	97	59	156	57	30	87
Keeping houses of ill-fame.....	48	31	79	36	26	62
Perjury.....	19	5	24	12	.....	12
Seduction.....	90	.....	90	41	.....	41
Indecent assault and exposure.....	198	1	199	135	1	136
Prostitution.....	.....	30	30	.....	13	13
	481	129	610	292	72	364

IV. OFFENCES AGAINST PUBLIC ORDER AND PEACE

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Abusive and obscene language.....	19	3	22	12	2	14
Breaches of peace and by-laws, escapes from and obstructing constables.....	266	21	287	200	11	211
Carrying unlawful weapons.....	55	1	56	34	1	35
Deserting employment.....	.....	.....	.....	.....	.....	.....
Deserting the militia.....	3	.....	3	1	.....	1
Drunk and disorderly.....	7,965	648	8,613	5,480	242	5,722
Breaches of the L. C. Act.....	4,478	272	4,750	3,418	179	3,597
Selling or giving liquor to Indians.....	52	1	53	43	.....	43
Threatening and seditious language.....	15	.....	15	7	.....	7
Vagrancy.....	2,431	254	2,685	1,659	142	1,801
Contempt of court.....	209	3	212	153	2	155
Lunatics or persons unsafe to be at large	314	76	390	.....	.....	.....
Total.....	15,807	1,279	17,086	11,007	579	11,586
Offences not classified.....	1,731	111	1,842	1,127	57	1,184
Grand Totals.....	24,285	1,695	25,980	16,825	801	17,626

TABLE No. 1

Offences for which prisoners were committed to gaol during the year.

	Showing the Number Committed			Number Sentenced		
	Males	Females	Total	Males	Females	Total
Abortion	2	5	7		3	3
Abusive and obscene language	19	3	22	12	2	14
Arson	18	3	21	9	3	12
Assault	533	17	550	326	7	333
Assault, felonious	128	7	135	82	1	83
Attempted suicide	39	7	46	23	2	25
Abduction	24	1	25	6		6
Bigamy	29	3	32	11	2	13
Breaches of the peace	101	2	103	78	1	79
Breaches of by-laws	76		76	57		57
Burglary	443	6	449	269	1	270
Carrying unlawful weapons	55	1	56	34	1	35
Contempt of court	209	3	212	153	2	155
Cruelty to animals	19		19	11		11
Counterfeiting and passing counterfeit money	2		2	2		2
Cutting and wounding and attempting same	7		7	3		3
Debtors	51		51			
Deserting employment						
Deserting the militia	3		3	1		1
Destroying and injuring property	74	1	75	41		41
Detained as witnesses	21	5	26			
Drunk and disorderly (not including breaches of Liquor Act)	7,965	648	8,613	5,480	242	5,722
Embezzlement	8		8	5		5
Escaping from or obstructing constable	89	19	108	65	10	75
Escaping from prison	44		44	37		37
Forgery	162	2	164	105	2	107
Fraud and obtaining money or goods under false pretences	699	24	723	386	8	394
Gambling	77		77	109		109
Giving liquor to Indians (not to include ordinary breach of Liquor Act)	52	1	53	43		43
Horse, cattle or sheep stealing	28		28	13		13
Housebreaking and robbery	601	1	602	385	4	389
Incendiarism						
Indecent assault and exposure	198	1	199	135	1	136
Inmates and frequenters of houses of ill-fame	97	59	156	57	30	87
Keeping houses of ill-fame	48	31	79	36	26	62
Larceny	2,328	93	2,421	1,749	58	1,807
Lunatics and persons who were unsafe to be at large	314	76	390			
Manslaughter	55		55	25		25
Misdemeanor	6	2	8	7		7
Murder	26	1	27	8		8
Perjury	19	5	24	12		12
Prostitution		30	30		13	13
Rape and assault with intent	58		58	35		35
Refusing bail						
Receiving stolen goods	75	6	81	60	2	62
Seduction	90		90	41		41
Selling liquor without license, or breach of liquor act	4,478	272	4,750	3,418	179	3,597
Shooting with intent	11		11	4		4
Stabbing	7		7	7		7
Threatening and seditious language	15		15	7		7
Trespass	962	3	965	862	2	864
Unlawful shooting	3		3	2		2
Vagrancy	2,431	254	2,685	1,659	142	1,801
Want of sureties to keep the peace						
Other offences not above enumerated	1,486	103	1,589	955	57	1,012
Total	24,285	1,695	25,980	16,825	801	17,626

TABLE

Showing the social status and habits of prisoners committed

	Prisoners Married			Prisoners Unmarried		
	Male	Female	Total	Male	Female	Total
Barrie.....	61	4	65	104	.....	104
Belleville.....	139	12	151	195	14	209
Bracebridge.....	28	.....	28	38	.....	38
Brampton.....	38	1	39	85	3	88
Brantford.....	113	7	120	157	5	162
Brockville.....	81	3	84	143	3	146
Cayuga.....	45	2	47	202	5	207
Chatham.....	164	21	185	295	18	313
Cobourg.....	63	5	68	99	4	103
Cornwall.....	82	2	84	163	2	165
Fort Frances.....	84	7	91	157	6	163
Goderich.....	38	.....	38	89	.....	89
Gore Bay.....	26	7	33	24	3	27
Guelph.....	96	10	106	90	.....	90
Haileybury.....	148	21	169	228	3	231
Hamilton.....	540	75	615	570	44	614
Kenora.....	31	3	34	94	1	95
Kingston.....	67	6	73	136	1	137
Kitchener.....	100	8	108	178	16	194
Lindsay.....	25	1	26	68	3	71
London.....	410	51	461	560	54	614
L'Original.....	27	1	28	44	1	45
Milton.....	39	2	41	159	4	163
Napanee.....	29	.....	29	78	3	81
North Bay.....	113	6	119	432	12	444
Orangeville.....	19	3	22	21	.....	21
Ottawa.....	401	52	453	535	53	588
Owen Sound.....	79	6	85	70	7	77
Parry Sound.....	70	11	81	105	2	107
Pembroke.....	35	1	36	60	7	67
Perth.....	24	.....	24	89	.....	89
Peterborough.....	131	10	141	211	24	235
Pictou.....	45	2	47	61	1	62
Port Arthur.....	214	10	224	879	34	913
St. Catharines.....	121	13	134	209	4	213
St. Thomas.....	84	9	93	117	11	128
Sandwich.....	568	53	621	849	24	873
Sarnia.....	152	19	171	235	10	245
Sault Ste. Marie.....	93	13	106	253	18	271
Simcoe.....	74	6	80	98	7	105
Stratford.....	51	7	58	81	4	85
Sudbury.....	447	41	488	1,451	22	1,473
Toronto.....	3,784	432	4,216	4,467	267	4,734
Walkerton.....	32	5	37	37	1	38
Welland.....	192	13	205	349	11	360
Whitby.....	168	12	180	147	4	151
Woodstock.....	68	3	71	134	3	137
Totals.....	9,439	976	10,415	14,846	719	15,565

No. 2

during the year ending 30th September, 1929

Temperate			Intemperate			Illiterate		
Male	Female	Total	Male	Female	Total	Male	Female	Total
101	3	104	64	1	65	10		10
182	26	208	152		152	39	4	43
43		43	23		23	10		10
45	3	48	78	1	79	3		3
63	5	68	207	7	214	3		3
105	6	111	119		119	17		17
89	5	94	158	2	160	3		3
190	6	196	269	33	302	57	2	59
92	9	101	70		70	14		14
60	2	62	185	2	187	181	2	183
121	5	126	120	8	128	23		23
69		69	58		58	12		12
12	1	13	38	9	47	17	4	21
129	10	139	57		57			
178	18	196	198	6	204	56	6	62
190	43	233	920	76	996	33	16	49
117	4	121	8		8	25	1	26
45	7	52	158		158	11		11
119	20	139	159	4	163	4		4
47	4	51	46		46	12	1	13
247	34	281	723	71	794	8	1	9
71	2	73				24	1	25
112	3	115	86	3	89	3		3
50	3	53	57		57	1	1	2
207	16	223	338	2	340	85	2	87
31	3	34	9		9	1		1
398	74	472	538	31	569	106	7	113
56	12	68	93	1	94	7		7
52	9	61	123	4	127	24	1	25
22	8	30	73		73	11		11
37		37	76		76	14		14
342	34	376				27		27
106	3	109						
451	32	483	642	12	654	59	3	62
71	8	79	259	9	268	16	2	18
184	20	204	17		17			
342	37	379	1,075	40	1,115	139	8	147
64	8	72	323	21	344	36	4	40
98	18	116	248	13	261	57	4	61
48	8	56	124	5	129	7		7
74	10	84	58	1	59	12	1	13
501	33	534	1,398	29	1,427	232	13	245
2,062	329	2,391	6,189	370	6,559	793	16	809
58	6	64	11		11	3		3
178	13	191	363	11	374	53	5	58
138	4	142	177	12	189	44	5	49
87	6	93	115		115	12		12
8,084	910	8,994	16,202	784	16,986	2,304	110	2,414

TABLE

Showing the number of persons committed, the number over and under sixteen years of age, unsound mind, number acquitted on trial, number discharged without trial, number

Name of Gaol	Total number committed during the year			Number under 16 years of age			Number 16 years of age and over			For the first time	For the second time
	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Barrie.....	165	4	169				165	4	169	105	36
Belleville.....	334	26	360	1	1	2	333	25	358	303	19
Bracebridge....	66		66	3		3	63		63	48	14
Brampton.....	123	4	127				123	4	127	85	23
Brantford.....	270	12	282				270	12	282	177	47
Brockville.....	224	6	230	4		4	220	6	226	157	38
Cayuga.....	247	7	254				247	7	254	179	25
Chatham.....	459	39	498	10		10	449	39	488	279	107
Cobourg.....	162	9	171	1		1	161	9	170	119	34
Cornwall.....	245	4	249	4		4	241	4	245	141	39
Fort Frances...	241	13	254	4	1	5	237	12	249	210	21
Goderich.....	127		127				127		127	77	35
Gore Bay.....	50	10	60		1	1	50	9	59	39	15
Guelph.....	186	10	196				186	10	196	108	55
Haileybury....	376	24	400				376	24	400	305	68
Hamilton.....	1,110	119	1,229				1,110	119	1,229	638	177
Kenora.....	125	4	129	6		6	119	4	123	107	11
Kingston.....	203	7	210	5		5	198	7	205	136	23
Kitchener.....	278	24	302	4	1	5	274	23	297	200	69
Lindsay.....	93	4	97	2	1	3	91	3	94	77	13
London.....	970	105	1,075	15	6	21	955	99	1,054	612	179
L'Orignal.....	71	2	73				71	2	73	63	9
Milton.....	198	6	204				198	6	204	112	87
Napanee.....	107	3	110	1		1	106	3	109	95	10
North Bay....	545	18	563	5		5	540	18	558	377	93
Orangeville....	40	3	43	3		3	37	3	40	32	8
Ottawa.....	936	105	1,041	4		4	932	105	1,037	978	54
Owen Sound....	149	13	162				149	13	162	77	30
Parry Sound...	175	13	188	3	1	4	172	12	184	174	13
Pembroke.....	95	8	103				95	8	103	96	5
Perth.....	113		113				113		113	90	13
Peterborough..	342	34	376				342	34	376	198	90
Pictou.....	106	3	109	5		5	101	3	104	100	4
Port Arthur...	1,093	44	1,137	4		4	1,089	44	1,133	1,030	107
St. Catharines.	330	17	347				330	17	347	171	51
St. Thomas....	201	20	221	3	1	4	198	19	217	160	30
Sandwich.....	1,417	77	1,494				1,417	77	1,494	1,424	27
Sarnia.....	387	29	416	8	2	10	379	27	406	291	68
Sault Ste. Marie	346	31	377	14	1	15	332	30	362	272	64
Simcoe.....	172	13	185	7	1	8	165	12	177	126	42
Stratford.....	132	11	143	1		1	131	11	142	93	23
Sudbury.....	1,898	63	1,961	1		1	1,897	63	1,960	1,433	310
Toronto.....	8,251	699	8,950	3		3	8,248	699	8,947	6,795	1,005
Walkerton....	69	6	75	1		1	68	6	74	55	14
Welland.....	541	24	565				541	24	565	386	96
Whitby.....	315	16	331				315	16	331	186	90
Woodstock....	202	6	208	1		1	201	6	207	206	2
	24,285	1,695	25,980	123	17	140	24,162	1,678	25,840	19,122	3,393

No. 3.

the number of re-committals, the number for want of sureties to keep the peace, number of waiting trial, number sentenced, and number committed under civil process.

For the third time	For more than the third time	For want of sureties to keep the peace	Witnesses	Lunatics and idiots	Fraudulent debtors	Under civil process	Acquitted on trial and discharged	Discharged without trial	Discharged under suspended sentence	Died before trial	Waiting trial	Sentenced for any period
13	15			4	1	4	2		12		3	143
19	19			2			147	1			2	208
3	1			3			1	7	1			54
10	9		1	4			8	9	20		2	83
27	31			4			85		10		2	181
23	12		1	3		3	32	3	14		10	164
14	36			2	3		15		1			233
73	39			11	4		48		80		7	348
13	5			8		17	10		30		2	104
31	38	3	2	1	6		26	2	16		3	190
20	3		2	11			17	46	27		4	147
11	4			3	4		4		20		6	90
5	1						6		2			52
25	8										2	194
13	14			29	5		8	2	1		6	349
83	331	8	4		7		16	198	37		7	952
10	1			6			31	3	8		3	78
15	36			6	2	12	12	5	6		10	157
16	17			4			111		12		3	172
5	2			10		1	5	5	15		3	58
72	212			12			452				18	593
1							14					59
3	2			1		78	3		6		6	110
5				3		18	6	4	15		2	62
51	42			11	2	3	66		3		4	474
3				3		7	2	1	5			25
9				2			441		53		7	538
11	44			4	1	1	14	2	4		1	135
1				7			24	16	2		6	133
1	1			1			8	6	8		1	79
3	7						6	2	3			102
38	50			7			157	29	7		6	170
4	1			3	2						4	100
			3	59			50		10	1	7	1,007
30	95						39		6		5	297
12	19			1	5		19	40	34	1	2	119
20	23			24	42		525		40		26	837
30	27			3			3	156	1		4	249
25	16			16			107				9	245
11	6			6			16	14	67		1	81
10	17		2		1	3	8	49	12		2	66
152	66		1	18	2		107	63	17		7	1,746
515	635		6	46	7		1,126	1,450	643	1	55	5,616
4	2			4	27		7		8			27
43	40		1	2			88		25		9	440
37	18			4			86		4		12	225
				5			18	18	35		3	129
1,520	1,945	11	23	353	121	147	3,976	2,131	1,320	3	274	17,621

TABLE

Showing the number of prisoners upon whom sentences

Name of Gaol	Total number of prisoners sentenced during the year			Where sentenced to									
	Male	Female	Total	To gaol and later to the reformatory	To reformatory direct	To gaol and later to female reformatory	To female reformatory direct	To penitentiary	To industrial school or refuge	Sentenced elsewhere	Died while undergoing sentence	To gaol until expiration of sentence or payment of fine	Under 30 days
Barrie	140	3	143	11	27			7		5		93	31
Belleville	198	10	208	3	42		6	3				154	74
Bracebridge	54		54		11				1			42	13
Brampton	81	2	83		20							63	48
Brantford	176	5	181	10	13	1		8				149	57
Brockville	158	6	164	33		6		4				121	31
Cayuga	226	3	229	3				1		3		222	206
Chatham	322	26	348	4	43		4	6	1	2		288	163
Cobourg	100	4	104	12			2	2	3			85	34
Cornwall	186	4	190	72	9		1	11	3			94	13
Fort Frances	139	8	147		12		1	2				132	83
Goderich	90		90	6				3				81	51
Gore Bay	43	9	52		6			3	1			42	16
Guelph	184	10	194		33		4	14		3		140	8
Haileybury	330	19	349	22	22	1	6	3	1			294	40
Hamilton	869	83	952	50	163	3	17	20		15	1	683	363
Kenora	76	2	78		7			2		1		68	16
Kingston	154	3	157	2	2	28		4		18		103	12
Kitchener	161	11	172	2	53		9	5	1	3	1	98	37
Lindsay	55	3	58	3	10		2	4	2			37	16
London	573	20	593	51	34	1		17		13	1	476	357
L'Orignal	59		59	12				2				45	24
Milton	105	5	110	1	9			5	1	2		92	33
Napanee	60	2	62		11			3	1	6		41	14
North Bay	461	13	474	4	44		6	4	2	1		413	341
Orangeville	22	3	25		3			3		3		16	3
Ottawa	498	40	538	4	60	2	1	12				459	295
Owen Sound	126	9	135	3	14	1	3	8	1		1	104	33
Parry Sound	126	7	133		25			4		1		103	44
Pembroke	73	6	79	3		2		2				72	40
Perth	102		102		13							89	29
Peterborough	158	12	170		25		3	7				135	60
Pictou	106	3	109		1			1		2		105	92
Port Arthur	975	32	1,007	709			1	13	6		3	275	77
St. Catharines	287	10	297	44		2		12		1		238	103
St. Thomas	110	9	119	2	15		3	1				98	43
Sandwich	808	29	837		97		17	17				706	501
Sarnia	239	10	249		60		3	6	2	2		176	69
Sault Ste. Marie	233	12	245	39		2		7	1		1	195	1
Simcoe	78	3	81	13				2	3			63	30
Stratford	63	3	66	1	11	1	1	2				50	17
Sudbury	1,709	37	1,746	966			9	14	1	1		755	618
Toronto	5,326	290	5,616	3,219	288		34	53	84		3	1,935	1,685
Walkerton	23	4	27		2							25	9
Welland	423	17	440	3	53		2	8				374	219
Whitby	212	13	225			46		7	2	6		164	37
Woodstock	128	1	129	22	1			2		1		103	14
Totals	16,825	801	17,626	5,329	1,239	96	135	314	117	89	11	10,296	6,100

No. 4.

were passed and the nature of such sentences.

Period of Sentences

30 days to 60 days	60 days or 2 months	Over 2 months to 3 months	Over 3 months to 4 months	Over 4 months to 5 months	Over 5 months to 6 months	Over 6 months to 9 months	Over 9 months to 1 year	Over 1 year up to 2 years	Over 2 years and up to 3 years Penitentiary	Over 3 years Penitentiary	Various periods, Industrial schools	Sentenced to death and executed	Sentenced to death and commuted to imprisonment	Imprisonment with corporal punishment	Total number sentenced
36	12	16	1	1	4	2	7	3	7	...	22	1	...	...	143
53	6	20	3	2	11	2	17	17	2	1	...	...	...	...	208
13	8	5	1	...	2	...	10	1	...	...	1	...	...	...	54
7	4	2	6	1	2	...	8	5	...	...	...	...	...	...	83
47	13	34	1	1	9	...	2	...	6	2	9	...	...	...	181
52	1	31	7	2	8	3	11	14	...	4	...	...	...	...	164
18	...	1	...	1	2	...	...	...	...	1	...	...	...	...	229
79	27	19	...	...	9	...	1	...	2	4	44	...	...	...	348
22	12	7	7	1	4	1	5	1	1	2	7	...	...	...	104
50	17	9	10	13	23	14	6	23	3	7	...	...	...	2	190
35	5	3	3	1	10	1	2	2	2	...	...	...	...	...	147
16	8	2	2	...	2	...	...	...	1	2	6	...	...	...	90
13	...	8	1	...	3	1	1	5	3	...	1	...	...	...	52
65	...	16	...	...	14	37	...	5	14	...	35	...	...	...	194
138	47	59	8	...	14	7	2	2	1	2	28	1	...	...	349
154	121	94	16	4	68	15	53	43	11	9	...	...	...	1	952
32	4	12	3	1	2	1	4	1	...	...	...	...	...	2	78
97	...	36	1	1	1	3	1	1	2	2	...	...	...	...	157
32	13	23	16	2	20	6	7	11	...	4	1	...	...	...	172
9	5	8	...	...	2	2	2	5	2	2	5	...	...	...	58
110	...	20	36	1	9	10	3	29	12	5	...	...	1	...	593
15	4	3	1	...	5	4	2	1	1	...	...	...	...	...	59
31	3	8	13	2	2	2	2	2	3	1	8	...	...	...	110
12	2	3	2	1	5	2	2	3	3	...	13	...	...	...	62
39	9	36	1	2	26	5	9	...	4	...	2	...	...	...	474
6	5	1	...	...	4	...	...	...	1	2	3	...	...	...	25
62	27	44	10	1	8	2	...	4	6	6	73	...	...	...	538
37	12	23	1	...	8	...	8	5	5	3	...	...	...	...	135
35	18	14	2	2	8	3	...	2	4	...	...	1	...	...	133
18	5	3	1	...	4	1	...	...	1	1	5	...	...	...	79
14	17	12	10	...	4	1	...	...	...	...	15	...	...	...	102
45	17	12	...	...	1	...	...	...	2	5	28	...	...	...	170
8	2	7	...	...	...	...	...	...	...	...	...	...	...	...	109
665	74	67	22	9	38	13	9	14	13	1	4	...	1	...	1,007
75	29	41	8	1	11	3	7	7	2	10	...	...	...	...	297
36	7	9	1	...	4	...	3	15	...	1	...	...	...	...	119
106	60	51	20	1	28	4	18	30	11	7	...	...	...	...	837
78	23	32	2	...	11	...	5	4	4	1	19	...	...	1	249
68	54	48	28	1	14	2	10	12	4	3	...	...	...	...	245
15	6	4	...	...	4	3	...	3	1	1	14	...	...	...	81
16	2	11	2	...	3	...	...	...	2	...	13	...	...	...	66
757	82	166	34	8	26	2	6	32	12	1	...	1	...	1	1,746
1,600	572	533	34	3	402	31	77	542	48	36	11	...	1	41	5,616
8	3	3	...	...	2	...	...	...	...	...	2	...	...	...	27
99	5	29	40	2	...	23	...	14	7	1	...	...	...	1	440
...	111	36	1	...	10	...	7	14	1	8	...	...	...	...	225
61	10	15	2	3	5	2	7	8	2	...	...	...	...	...	129
4,984	1,462	1,636	357	68	831	223	307	880	214	136	372	4	3	49	17,626

TABLE

Showing the number of prisoners, how maintained, cost of maintenance, and

Name of Gaol	Name of Gaoler	Prisoner days				
		Number committed during the year.	Number paid for by Province	Number paid for by municipalities	Number of days Government prisoners	Number of days municipal prisoners
Barric.....	J. J. D. Banting.....	169	46	123	1,792	2,335
Belleville.....	T. Ketcheson.....	360	149	211	1,815	4,524
Bracebridge.....	Duncan McDonald.....	66	66	.....	1,772	.....
Brampton.....	W. A. Partridge.....	127	51	76	771	730
Brantford.....	John Cook.....	282	88	194	2,184	3,909
Brockville.....	J. A. McLean.....	230	108	122	1,651	3,616
Cayuga.....	Jas. B. Smith.....	254	39	215	1,307	1,387
Chatham.....	M. W. Shaw.....	498	113	385	2,658	8,812
Cobourg.....	G. L. McLaughlin.....	171	53	118	1,422	3,008
Cornwall.....	T. W. Ault.....	249	113	136	3,026	2,783
Fort Frances.....	John E. King.....	254	254	.....	3,445	.....
Goderich.....	Jas. B. Reynolds.....	127	56	71	1,783	1,227
Gore Bay.....	J. W. Griffith.....	60	60	.....	1,738	.....
Guelph.....	Major T. L. Cosby.....	196	53	143	656	2,798
Haileybury.....	John L. Maltby.....	400	400	.....	15,778	.....
Hamilton.....	Frank Lalonde.....	1,229	299	930	6,985	18,717
Kenora.....	E. W. Cox.....	129	129	.....	4,333	.....
Kingston.....	Jos. T. Hawkey.....	210	58	152	1,334	5,184
Kitchener.....	L. C. Bullock.....	302	92	210	1,476	4,220
Lindsay.....	Henry W. Stone.....	97	53	44	1,066	990
London.....	Chas. H. Mitchell.....	1,075	110	965	1,479	14,440
L'Orignal.....	J. A. Sabourin.....	73	12	61	946	883
Milton.....	Archie McGibbon.....	204	42	162	935	3,194
Napanee.....	W. E. Loyst.....	110	47	63	608	647
North Bay.....	J. W. Bourke.....	563	563	.....	7,613	.....
Orangeville.....	Geo. A. Leighton.....	43	14	29	737	1,648
Ottawa.....	A. G. Dawson.....	1,041	202	839	8,987	8,299
Owen Sound.....	W. A. Grier.....	162	47	115	1,311	2,903
Parry Sound.....	T. W. Keating.....	188	188	.....	4,051	.....
Pembroke.....	William Brown.....	103	42	61	1,369	959
Perth.....	John Oates.....	113	31	82	1,433	4,223
Peterborough.....	J. T. Dalton.....	376	79	297	1,741	3,088
Pictou.....	Earl Croft.....	109	28	81	344	208
Port Arthur.....	G. F. Lasseter.....	1,137	162	975	2,515	15,568
St. Catharines.....	John J. Dundas.....	347	67	280	889	7,444
St. Thomas.....	C. P. Ermatinger.....	221	76	145	2,246	2,745
Sandwich.....	W. A. Wanless.....	1,494	164	1,330	5,796	20,151
Sarnia.....	J. N. Dodd.....	416	30	386	1,342	7,338
Sault Ste. Marie.....	R. M. Hearst.....	377	377	.....	12,136	.....
Simcoe.....	G. M. Boughner.....	185	85	100	1,650	894
Stratford.....	A. T. Trethewey.....	143	78	65	1,932	1,998
Sudbury.....	W. H. O'Leary.....	1,961	1,961	.....	11,731	.....
Toronto.....	Major G. H. Basher.....	8,950	1,972	6,978	15,612	63,020
Walkerton.....	M. W. Hyndman.....	75	17	58	560	1,285
Welland.....	Donald Sharpe.....	565	85	480	2,552	8,181
Whitby.....	Hugh F. Lucas.....	331	91	240	2,400	5,657
Woodstock.....	George Forbes.....	208	54	154	1,699	3,033
Totals.....	.....	25,980	8,904	17,076	151,606	242,146

No. 5

salaries of various gaol officials, for the year ending September 30th, 1929.

Expenditure					Salaries				
Cost of fuel, food and clothing	Cost of officials' salaries	Cost of repairs	Total gaol expenditure for the year	Average cost per prisoner	Gaolers	Turnkeys, etc.	Matrons	Gaol Surgeons	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
2,280 49	3,844 00	81 36	6,205 85	36 72	1,200 00	1,774 00	570 00	300 00	
3,524 00	2,000 00	50 00	5,574 00	15 48	700 00	650 00	400 00	250 00	
637 68	1,850 00	23 50	2,511 18	38 05	1,400 00	.....	300 00	150 00
1,013 99	1,670 00	69 07	2,753 06	21 68	720 00	600 00	250 00	100 00	
2,021 10	6,071 25	250 00	8,342 35	29 59	1,500 00	3,827 25	400 00	344 00	
1,734 27	2,250 00	151 68	4,135 95	17 98	1,150 00	750 00	200 00	150 00	
1,396 09	2,473 28	9 40	3,878 77	15 27	1,066 64	966 64	300 00	140 00	
2,034 09	4,840 00	402 75	7,276 84	14 61	1,081 00	3,060 00	500 00	200 00	
3,045 21	2,292 98	96 96	5,435 15	31 78	1,000 00	893 00	199 98	200 00	
2,929 16	3,559 00	388 51	6,876 67	27 62	1,575 00	1,406 00	378 00	200 00	
916 27	3,181 00	148 10	4,245 37	16 71	1,500 00	1,300 00	300 00	81 00	
796 31	2,245 00	81 45	3,122 76	24 59	1,000 00	900 00	225 00	120 00	
1,775 10	1,177 75	91 97	3,044 82	50 74	774 00	115 00	288 75	.....
1,528 93	2,322 99	.....	3,851 92	19 65	1,000 00	822 99	300 00	200 00
5,265 24	7,655 00	208 97	13,129 21	32 82	1,700 00	5,355 00	300 00	300 00	
4,030 00	13,580 00	650 00	18,260 00	14 86	1,800 00	10,600 00	1,180 00	.....
2,578 25	3,429 00	.....	6,007 25	46 57	1,112 00	1,796 00	321 00	200 00
2,945 51	4,946 00	200 00	8,091 51	38 53	1,500 00	2,746 50	399 50	300 00	
2,805 01	3,604 15	231 75	6,640 91	21 99	1,227 17	1,497 00	379 98	500 00	
1,562 35	2,695 00	412 52	4,669 87	48 14	1,140 00	1,215 00	240 00	100 00	
4,569 00	13,581 19	1,308 00	19,458 19	18 10	1,500 00	10,041 53	1,539 66	500 00	
548 38	1,830 00	143 50	2,521 88	34 55	750 00	730 00	250 00	100 00	
1,293 90	1,900 00	379 00	3,572 90	17 51	900 00	750 00	200 00	50 00	
633 10	1,475 00	.....	2,108 10	19 17	1,000 00	.....	400 00	75 00
3,838 67	6,358 56	209 99	10,407 22	18 48	1,020 84	4,737 00	450 72	150 00	
2,070 84	2,075 00	226 56	4,372 40	101 68	1,300 00	250 00	400 00	125 00	
11,624 12	10,814 84	526 25	22,965 21	22 06	2,300 00	7,499 84	650 00	365 00	
2,170 95	2,650 00	100 00	4,920 95	30 38	1,200 00	900 00	300 00	250 00	
443 18	2,650 00	35 00	3,128 18	16 64	1,000 00	1,200 00	300 00	150 00	
2,387 69	3,028 75	400 00	5,816 44	56 47	1,700 00	1,003 75	225 00	100 00	
1,942 82	2,400 00	171 25	4,514 07	39 95	1,000 00	1,000 00	300 00	100 00	
1,079 68	2,100 00	142 89	3,322 57	8 84	900 00	800 00	200 00	200 00	
1,123 66	1,075 00	584 25	2,782 91	25 53	800 00	.....	200 00	75 00
11,104 20	9,386 50	.....	20,490 70	18 02	1,900 00	6,874 50	360 00	252 00
3,649 03	3,750 00	215 11	7,614 14	21 94	1,200 00	2,100 00	300 00	150 00	
1,850 29	3,970 00	154 20	5,974 49	27 03	1,420 00	2,100 00	300 00	150 00	
9,701 96	11,930 53	322 51	21,955 00	14 69	1,600 00	8,930 53	900 00	500 00	
3,148 65	3,478 00	1,085 97	7,712 62	18 54	1,075 00	1,703 00	500 00	200 00	
6,636 97	4,829 48	359 74	11,826 19	31 37	1,226 00	3,003 48	300 00	300 00	
2,219 01	2,350 00	441 74	5,010 75	27 08	840 00	1,110 00	250 00	150 00	
2,115 63	2,989 80	24 78	5,130 21	35 87	1,100 00	1,269 80	470 00	150 00	
3,750 55	7,502 50	.....	11,253 05	5 74	1,700 00	5,277 50	300 00	225 00
22,511 24	43,772 42	4,380 37	70,664 03	7 90	3,300 00	32,082 82	6,889 60	1,500 00	
778 93	1,900 00	257 83	2,936 76	39 16	800 00	700 00	300 00	100 00	
3,817 81	5,859 98	1,314 19	10,991 98	19 45	1,375 00	3,909 98	375 00	200 00	
4,377 17	2,740 00	508 79	7,625 96	23 04	850 00	1,462 00	278 00	150 00	
2,831 10	3,090 03	845 48	6,766 61	32 53	974 97	1,503 06	412 00	200 00	
157,037 58	235,173 98	17,685 39	409,896 95	15 78	58,876 62	141,213 17	24,782 19	10,302 00	

TABLE No. 6

Showing the total number of prisoners who were in the several gaols in the Province on the evening of September 30th, 1929, and the nature of their imprisonment; also number of cells in each gaol.

Name of Gaol	Classification				Nature of Imprisonment					Total number of persons who remained in custody, 30th Sept., 1929	Total number of cells	
	Men	Women	Boys under 16 years	Girls under 16 years	Waiting trial	Under sentence for periods of 2 months and under	Under sentence for periods over 2 months	In default of sureties to keep the peace	Insane, idiotic or imbecile persons			Otherwise detained
Barrie.....	16				3	4	8					
Belleville.....	13	1			2	2	10			1	16	23
Bracebridge.....	7					2	5				14	38
Brampton.....	1	1				1	1				7	10
Brantford.....	21				2	3	1				2	24
Brockville.....	23				4	15	4				21	24
Cayuga.....	4					2	2				23	33
Chatham.....	26	3			7	12	2				4	12
Cobourg.....	7	1			1	3	8		2		29	39
Cornwall.....	12				3	1	7				8	24
Fort Frances.....	15				4	4	7	1			12	17
Goderich.....	10				6		4				15	10
Gore Bay.....	7					1	6				10	16
Guelph.....	13				2	11					7	12
Haileybury.....	53	6			5	18	31		5		13	18
Hamilton.....	51	5			4	22	29				59	32
Kenora.....	13				3	3	7			1	56	60
Kingston.....	27	1			5	10	13				13	14
Kitchener.....	14	1			3	7	5				28	49
Lindsay.....	10				3	3	4				15	27
London.....	41	4			18	10	16		1		10	24
L'Orignal.....	6					2	4				45	57
Milton.....	16	2			6	6	5				6	18
Napanee.....	4				2		2			1	18	20
North Bay.....	23				4	10	9				4	18
Orangeville.....	6					2	4				23	19
Ottawa.....	43	8			2	12	32				6	22
Owen Sound.....	17	4			1	2	17			5	51	93
Parry Sound.....	14	5			1	5	8		1		21	32
Pembroke.....	8	1			1	2	6		2		20	22
Perth.....	6					2	4				9	24
Peterborough.....	20	2			6	8	8				6	18
Picton.....	5	1			4		2				22	18
Port Arthur.....	33	2			7	19	8				6	18
St. Catharines.....	23	3			4	11	11		2		36	73
St. Thomas.....	14	1			2	7	5				26	36
Sandwich.....	78	7			20	10	41			1	15	16
Sarnia.....	17				9	3	12			14	85	109
Sault Ste. Marie	25	3			2	9	8				17	13
Simcoe.....	8	1			1	2	6				30	23
Stratford.....	9	1			2	2	6				9	19
Sudbury.....	23	5			7	16	2				10	30
Toronto.....	206	12			55	124	29		2	1	28	22
Walkerton.....	3				3					10	218	214
Welland.....	28				5	17	6				3	24
Whitby.....	27				12	3	11				28	48
Woodstock.....	9				3	3	3		1		27	28
Totals.....	1055	81	4	238	413	438	1	16	34	1,140	1,573	

TABLE No. 7

Showing the number of escapes and deaths, the revenue derived from prison labour, the cost of diet, the accommodation of the various gaols, and the highest and lowest number of prisoners in custody during year ending September 30th, 1929.

Name of Gaol	Prisoners who escaped and evaded capture	Prisoners who escaped and were recaptured	Prisoners who died	Number of cells in each gaol	Greatest number of prisoners confined in gaols at any time during year	Least number of prisoners confined in gaols during year	Actual cash revenue derived from prison labour	Daily per capita dietary cost
							\$ c.	cents
Barrie.....				23	21	5		14.75
Belleville.....				38	36	8		16.84
Bracebridge.....				10	15			15.00
Brampton.....				24	10			15.10
Brantford.....		2		24	29	7		15.12
Brockville.....				33	23	5		20.01
Cayuga.....				12	19			15.25
Chatham.....		2		39	42	14		11.49
Cobourg.....				24	17	6		17.86
Cornwall.....				17	27	5		17.75
Fort Frances.....				10	19	3		15.28
Goderich.....				16	15	5		12.75
Gore Bay.....				12	11	1		60.00
Guelph.....				18	18	5		19.50
Haileybury.....				32	59	19		19.98
Hamilton.....				60	97	42		15.89
Kenora.....				14	24	4		18.60
Kingston.....	1			49	33	6	2,100 00	16.75
Kitchener.....				27	28	6		19.11
Lindsay.....				24	12	1		15.45
London.....				57	69	24		14.40
L'Original.....				18	12			22.00
Milton.....	1	1		20	21	4		18.73
Napanee.....				18	9	1		15.08
North Bay.....				19	43	7		18.50
Orangeville.....				22	12	3		24.00
Ottawa.....		2		93	65	27	419 59	18.33
Owen Sound.....				32	22	6		18.98
Parry Sound.....				22	22	6		20.16
Pembroke.....				24	12			16.50
Perth.....		4		18	31	3		15.00
Peterborough.....				18	26	1		16.75
Picton.....				18	11	1		15.25
Port Arthur.....	1	1	1	73	91	31		16.60
St. Catharines.....				36	35	13		15.33
St. Thomas.....			1	16	25	7		14.49
Sandwich.....				109	117	64		14.70
Sarnia.....				13	38	16		15.66
Sault Ste. Marie.....				23	52	17		24.11
Simcoe.....				19	17	3		14.00
Stratford.....				30	20	5		12.91
Sudbury.....				22	69	15		21.75
Toronto.....			1	214	280	126		13.00
Walkerton.....				24	11	1		16.50
Welland.....				48	51	15		17.87
Whitby.....				28	33	10		19.50
Woodstock.....				33	23	7		12.69
Totals.....	3	12	3	1,573	1,772	555	2,519 59	17.77

TABLE No. 8

Showing the daily cost per prisoner in each of the gaols, excluding the District Lock-ups, for the year ending September 30th, 1929

Name of Gaol	Number of prisoners committed during year	Total days' stay of prisoners during year	Cost of fuel, food and clothing	Average cost per day for fuel, food and clothing
			\$ c.	
Barrie.....	169	4,127	2,280 49	.55
Belleville.....	360	6,339	3,524 00	.56
Bracebridge.....	66	1,772	637 68	.36
Brampton.....	127	1,501	1,013 99	.67
Brantford.....	282	6,093	2,021 10	.33
Brockville.....	230	5,267	1,734 27	.33
Cayuga.....	254	2,694	1,396 09	.52
Chatham.....	498	11,470	2,034 09	.18
Cobourg.....	171	4,430	3,045 21	.68
Cornwall.....	249	5,809	2,929 16	.50
Fort Frances.....	254	3,445	916 27	.27
Goderich.....	127	3,010	796 31	.26
Gore Bay.....	60	1,738	1,775 10	1.02
Guelph.....	196	3,454	1,528 93	.44
Haileybury.....	400	15,778	5,265 24	.33
Hamilton.....	1,229	25,702	4,030 00	.16
Kenora.....	129	4,333	2,578 25	.59
Kingston.....	210	6,518	2,945 51	.45
Kitchener.....	302	5,696	2,805 01	.49
Lindsay.....	97	2,056	1,562 35	.76
London.....	1,075	15,919	4,569 00	.29
L'Original.....	73	1,929	548 38	.28
Milton.....	204	4,129	1,293 90	.31
Napanee.....	110	1,255	633 10	.50
North Bay.....	563	7,613	3,838 67	.50
Orangeville.....	43	2,385	2,070 84	.87
Ottawa.....	1,041	17,286	11,624 12	.67
Owen Sound.....	162	4,214	2,170 95	.51
Parry Sound.....	188	4,051	443 18	.11
Pembroke.....	103	2,328	2,387 69	1.02
Perth.....	113	5,656	1,942 82	.34
Peterborough.....	376	4,829	1,079 68	.22
Picton.....	109	552	1,123 66	2.03
Port Arthur.....	1,137	18,083	11,104 20	.61
St. Catharines.....	347	8,333	3,649 03	.44
St. Thomas.....	221	4,991	1,850 29	.37
Sandwich.....	1,494	25,947	9,701 96	.37
Sarnia.....	416	8,680	3,148 65	.36
Sault Ste. Marie.....	377	12,136	6,636 97	.54
Simcoe.....	185	2,544	2,219 01	.87
Stratford.....	143	3,930	2,115 63	.54
Sudbury.....	1,961	11,731	5,103 00	.43
Toronto.....	8,950	78,632	22,511 24	.29
Walkerton.....	75	1,845	778 93	.42
Welland.....	565	10,733	3,817 81	.36
Whitby.....	331	8,057	4,377 17	.54
Woodstock.....	208	4,732	2,831 10	.60
Totals.....	25,980	393,752	158,390 03	.51

Reformatories

THE ONTARIO REFORMATORY, GUELPH

FISCAL YEAR 1928-1929

Sir:

I have the honour to present herewith the statistical report of the Custodial Department of the Ontario Reformatory, for the year ending October 31, 1929.

Probably the most striking item as well as the most regrettable, consists in the number of inmates admitted below twenty-one years of age. Of all the reasons advanced for man committing crime, it has been established beyond argument that the greatest and most conclusive reason of all is the lack of proper training and guidance in their earlier years. Parents and others of the present older generation have not sufficiently followed changing conditions and therefore have failed to exert the helpful and restraining influence on the younger generation that has been needed.

The officers of this institution recognizing that fact, apply as far as is possible, correcting influences to the young man who has been, probably, the willing victim of such circumstances. It has been our experience that for many of our prisoners, the first requirements for reformation are repentance and work. Very often they first work and then repent. Accordingly we place men newly admitted at pick and shovel work, giving them discipline, and then later, when we consider that they have thoroughly learned the lesson of work, they are placed in the prison industries, generally at the work at which they are most expert or which they wish to learn. We believe that this lesson of learning to work is one of the most important lessons of life.

Many of these men are handicapped through lack of an ordinary school education. Of the 892 admitted during the year, 129 had little or no education and many of these were entirely illiterate. In enlightened Ontario, where millions of dollars have been and are being spent on education, it is astounding to find that 60 per cent. of these illiterates and near illiterates lived in Ontario during school age, a large number of them being native-born. Furthermore, none of them came to this institution from the northern portions of Ontario. It has been amply proved that an ordinary diligent adult with average intelligence, can, in a few weeks with good coaching learn to read and write. During the year 284 men attended the school here, taking courses from the primary to matriculation. In the winter months the primary classes met in the afternoons. All other classes were held during evening hours.

The 892 admitted, compares favourably with 1,001 admitted the previous year. However, the sentences imposed were longer and so our average daily count was about the same as the previous year. These longer sentences increased the custodial risk, especially in such a wide open prison system as is followed here. This accounts for the six escapes, which is still a remarkably low percentage when one considers all the factors entering the situation and the 1,450 in custody during the year.

Industrially we have had a successful year, most of the factories operating to full capacity and the other public institutions taking the entire output with satisfaction and financial saving to all parties concerned. The only blot on the year's operations was the burning of the rock-crushing plant on July 4th, during a heavy electrical storm. It is now being re-built.

Many thousands of visitors were shown through the institution, especially during the summer months. The landscape gardens as usual, attracted many.

Extensive additions to these gardens were made in the winter and early summer and much yet remains to be done. It must be kept in mind that these gardens are primarily disciplinary propositions, giving hard work to those prisoners who need it.

The officers of the reformatory are greatly indebted to members of religious, athletic, musical and other organizations who assisted in the work of the institution during the year.

In conclusion I have the following recommendations to present to you:—

1. In view of the fact that at the time of writing this report, the inmate population of the Ontario Reformatory is almost double that intended for the present accommodation, that other arrangements be made immediately for the housing of the criminal insane in the Ontario Hospital, Guelph, thus releasing space for the Ontario Reformatory.
2. That examinations, physical and mental, be set for prospective officers.
3. That there be put into effect at once, segregation of inmates by institutions, thus separating first offenders and recidivists, commonly known as "repeaters."

The marked success of the past year has been due in large part to the earnest, efficient efforts of your officers here. I thank you, Sir, for the very loyal and strong support you and other officers of the Government have given us.

I have the honour to be, Sir,

Your obedient servant,

C. F. NEELANDS,
Superintendent.

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

ONTARIO BRICK AND TILE PLANT, MIMICO

15TH NOVEMBER, 1929

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

Dear Sir:—

I have the honour to present to you our annual report for year 1928-1929.

An addition to our record system has now been made since last year, as photographs and finger prints are taken of each inmate on entry here. We have found this to be most useful for identification purposes.

HEALTH OF INMATES

The health of our inmates has been excellent during the past year, only a very few isolated cases were sent to hospital. This high standard is in no small measure due to the kindly care and frequent visits of Doctor McLeod of the Ontario Hospital, Mimico. When admittance to hospital is necessary St. Joseph's Hospital and Western Hospital have always come to our aid.

POPULATION

We admitted this past year 368 men, leaving a population of 155 on our strength at the end of the present year; this is the largest number ever admitted to this institution in one year. Should this continue we would suggest an addition to our living quarters be made. This suggestion was also made last year.

FARM

Our total live stock including implements amounted to \$10,579.80. Our total farm recoveries for the year, including feed and vegetables grown, amounts to \$15,782.89. This is a good return considering the poor farming weather we experienced.

BUILDINGS

Our building operations for the year were as follows: horse stable, modernization of cow stable, and completion of the brick shed commenced last year. Two small kilns have been pulled down and from the salvage the large kiln has been renewed and is now in operation. Work on an addition to our dryers is under way.

MILL

We have been running our mill to full capacity in the past year, and our output shows an increase accordingly.

RELIGIOUS SERVICES, ENTERTAINMENTS, SPORTS

The Salvation Army carry on their good work by holding service here each Sunday. Their efforts are much appreciated. During the summer evenings softball and football were much indulged in by the inmates. We desire to thank the outside teams who visited us. Through the kindness of business firms in donating prizes our annual field day was a great success. Through the kind permission of the Honourable the Provincial Secretary the staff had a most pleasant and enjoyable dance last New Year.

In conclusion, I wish to thank you, Sir, and all officials of the Department for their courtesy and kind co-operation in the past.

I have the honour to be, Sir,

Your obedient servant,

J. R. ELLIOTT,

Superintendent.

INDUSTRIAL FARM, BURWASH

November 21, 1929.

Dear Sir:

I have the honour to submit herewith the annual statistical report for this institution for the fiscal year ending October 31st, 1929.

For the past two years our admissions have shown a marked increase. Admissions in 1928 amounted to 1,175; this year 1929, amounted to 1,439, this is a very marked increase for the year.

HOSPITAL

The health of our inmate population has been good, and our hospital is now on a first-class working basis.

In this connection we have added a clinic to supply the needs of the guards, their wives and families. This has a separate entrance and has proven an inestimable boon to all concerned. We have also an up-to-date dental parlour. This has just been put into commission this year.

The new venereal clinic, lavatory, and dining-room has been in operation for the past nine months, and has given us exceptionally good service.

BUILDINGS

A very much-needed addition has been added to our stable. We have also built three houses, giving five extra homes for our guards and their families. Looking over the housing situation it seems to me that we will be able to take care of all our men who have asked for homes adjoining the institution.

FARM PRODUCTS

The total value of farm products, grain, etc., amounts to \$34,369.46. In this connection we have had an exceptionally good year, our hay crop being the heaviest for many years. The value of lumber used for building fuel, and other purposes amounts to \$27,984.65. This makes a total of \$62,354.11. This is an increase over the previous year.

The value of our live stock is \$17,405.00. This is quite an increase over last year, 1928, the value of our stock being \$14,132.00. We expect at the end of the present fiscal year to have reached our maximum with our sheep, that is around 500. This will enable us to have a heavy shipment of wool and of lambs. At present we are shipping three or four carloads of live stock, from which we receive about \$5,000 in revenue.

A great deal of work has been done in and around the institution to beautify it, and make living conditions for our families as pleasant and village-like as possible. The sports, social, and religious life of our community are well looked after. We have Rev. Father Trounseau, for the Roman Catholic body of our inmates, and Rev. Mr. Bruce, Anglican Minister at Copper Cliff, visits us every two weeks and conducts a service. I cannot speak too highly of the services of these gentlemen.

I would like to draw your attention to the increased number of old men which he have to take care of. Every year we have a number of these unfortunates sent to us. Last year which was the largest in our history, we had thirty-four men over sixty years of age. This year we have taken care of sixty-four. These men are not criminals, but unfortunates, getting old, unable to carry on their daily work and earn a living, classed as vagrants and sent down to us. Surely this north country should be able to erect a house of refuge so that the stigma of spending their reclining years in prison could be removed from these unfortunates. The average age is from sixty to eighty years.

Sincerely yours,

J. K. FAIRFIELD,
Superintendent.

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

THE INDUSTRIAL FARM, FORT WILLIAM

November 20th, 1929.

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

Sir:

I have the honour to submit to you our annual report for the year ending October 31st, 1929. Our statistical report shows a slight decrease in the number of men committed as compared with last year. We have had very little trouble in the matter of escapes, only one being reported.

There is great need at this institution for a recreation hall. At the present time the inmates are using a room in conjunction with the guard's quarters which is very inadequate for recreation of any kind and I wish to propose that a hall be built adjoining the present dormitories so that the men will be able to put on concerts and have picture shows occasionally. This I consider very necessary from an educational and amusement standpoint.

The buildings during the past year have been painted and generally renovated. There is still room for quite an extensive remodelling and building programme.

FARM PRODUCTS

During the past year farm and garden products have been considerably lessened owing to the continual drought in the growing season, in some cases the crops were practically a failure. We have a fine herd of pure-bred Holsteins and several head of young cattle coming along. This will necessitate more barn room and I would suggest that during the coming year the present dairy barn be remodelled and a new horse stable built. The most of the horses we have at this institution at the present time, owing to old age have practically outlived their usefulness, and we require at least two new teams for immediate use. The system of supplying the farmers of this community with pure-bred bull calves is very greatly appreciated.

I wish to take this opportunity of thanking you and the officers of the department for the great courtesy and many kindnesses which have been shown me. I also wish to thank the Rev. D. McIvor of Fort William and the local unit of the Salvation Army for their many kindnesses shown to the inmates and staff of this institution.

All of which is respectfully submitted.

I have the honour to be,

Your obedient servant,

N. J. OLIVER,
Superintendent.

INDUSTRIAL FARM, LANGSTAFF

December 17th, 1929.

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
 Parliament Buildings, Toronto.

Sir:—

I have the honour to submit herewith my Thirteenth Annual Report of the Toronto Municipal Farm, consisting of the statistical report, medical report and report of farming operations from the farm foreman.

In reviewing the figures of the past year it is noted that a smaller number of inmates passed through the institution; this is due to the longer terms being imposed, the daily average population being as high as formerly.

The health of the inmates has remained in a good state there being no epidemic diseases; there were ten deaths during the year; most of these being aged inmates. There was one escape; the offender not having been apprehended. Due attention has been paid to social diseases as you will note from the report of the institutional surgeon.

In conclusion, Sir, permit me once again to thank you and officers of your department for the kind consideration and help in the direction of the institution. I would also here like to again publicly extend my thanks to all those earnest and helpful people who have ministered to the spiritual and social welfare of the inmates and helped us in re-establishing them by procuring work and helping on discharge a large number to get their feet under them; among these I wish especially to mention, Captain Buntin and other officers of the Salvation Army, Canon J. C. Davidson and Rev. Mr. Barnett of the Church of England, Rev. Fr. Malone of the Roman Catholic Church; earnest workers of the Christian Science Church and others, including the Sportsmen's Association of Toronto, who supplied Christmas and New Year's Cheer.

I have the honour to be, Sir,

Your obedient servant,

Major W. J. MORRISON,
Superintendent.

INDUSTRIAL FARM, CONCORD

January 1st, 1930

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
 Parliament Buildings, Toronto.

Dear Sir:—

I have the honour to present you with the annual statistical report for this institution for the fiscal year ending October 31st, 1929.

The discipline has been satisfactory, for such an institution as this.

There is always plenty of employment, both indoors and outside. Laundry and sewing is done for the population at the Langstaff Farm, as well as our own, and all sorts of gardening, caring for poultry, which is now becoming a very

successful industry, raising sheep, caring for cattle, dairying, etc., all of which is taught the prisoner who is sentenced to serve the longer term.

The health of the inmates has been very good, no doubt owing to the opportunity they have of getting outside, part of each day, when the weather permits.

I wish to thank the officers of your department, for the co-operation and guidance in carrying on our work, also to commend to you the loyal service of the staff.

To the social service workers and different religious denominations, who have shown a continued interest in the welfare of the inmates, I offer my sincere thanks.

I have the honour to be, Sir,

Your obedient servant,

MARGARET MAUD CARSON,
Superintendent.

MERCER REFORMATORY, TORONTO

December 17th, 1929.

H. M. ROBBINS, ESQ.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

Dear Sir:—

I have the honour to submit the annual report of the Andrew Mercer Ontario Reformatory for Females for the year ending October 31, 1929.

During the year there were admitted to the reformatory one hundred and fifty-two (152) inmates, a decrease of twenty-eight from the previous year. I am sorry to report that there are quite a number whose defective mentality is noticeable even to the casual observer—what will become of them when their term expires?

The work done in the factory, laundry and workshops has been most satisfactory. The majority of the inmates work diligently and well. Here I may call attention to the fact that a number of women are sent to the reformatory who are totally unfit for work of any kind and who, consequently, interfere with the discipline of the institution.

The school, with its efficient teacher, is of great benefit to the many illiterate received in this institution, and great is the satisfaction of those attending in attaining there such instruction as will enable them to read and write.

In fine weather on public holidays, tea was enjoyed by the inmates out-of-doors. During the winter, many kind friends provided entertainments, and moving pictures were shown weekly through our pathoscope. The radio, which we were able to purchase through the Foote Bequest, has been a source of real pleasure.

It was a great satisfaction to have so many of our girls call during the year and relate their happiness and express their gratitude for the help and advice given them while inmates of this institution.

The general conduct of the inmates has been good, and the discipline well maintained considering the number of incorrigibles we have from other institutions.

Let me take this opportunity to thank most sincerely the many kind friends and well-wishers of the reformatory who, very often at inconvenience to themselves, have given their time and thought to the inmates of this institution.

The reformatory suffered a great loss during the past year, in the death of the Reverend Father Reath, also in the continued illness of Venerable Archdeacon Ingles, whose faithful administrations, for a number of years, made them the institution's best friends and helpers.

In closing, I gratefully acknowledge the assistance rendered me by every member of the staff in maintaining the discipline of the reformatory.

I beg to extend my thanks to you and the officials of your department for your kindness and courtesy during the year.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

LETITIA SCOTT,
Superintendent.

DRAFT OF REPORT OF ONTARIO BOARD OF PAROLE FOR YEAR ENDING OCTOBER 31, 1929

In submitting the report for the past year, a comparative statement is given below from which it will be seen that the number of cases dealt with was larger than any previous year.

The statistical record for the year is as follows:

Meetings of the Board.....	30
Cases dealt with.....	1,702
Paroles authorized.....	747
Paroles put into effect, and employment secured for them.....	615
Disappeared.....	73 (11.7%)
Committed crime while on parole.....	53 (8.7%)
Sent back and parole cancelled.....	31 (5%)
Recommended for extra-mural employment (Cap. 163, R.S.C. as 13-15, 49, 61).....	310
Recommended for ticket-of-leave.....	4
Persons outside under supervision, October 31, 1929. On parole..	429
On extra-mural permit.....	141

The following is the record for five previous years

	1916	1925	1926	1927	1928
Meetings of the Board.....					26
Cases dealt with.....	164	1,347	1,296	1,364	1,680
Paroles authorized.....	52	408	473	504	650
Paroles put into effect.....					369
Disappeared.....		25	41	46	35
Committed crime on parole (no record).....		41	16	18	31
Sent back and parole cancelled (no record).....			30	21	24
Recommended for extra-mural employment (Cap. 163, R.S.C. 13-15, 49, 61).....		108	116	141	305
Recommended for ticket-of-leave.....	23	25	16	11	5

It will be noted that the number of paroles authorized was in excess of those put into effect. The reason for this is that in a number of cases the parole was

authorized to take effect at a later date than the end of the fiscal year. There are also a number authorized in every year which cannot be put into effect because of inability to meet the conditions. Sometimes there is misbehaviour by the prisoner in the institution. Sometimes work is not available. At other times facts come to light which were not available when the decision of the Board was given.

The percentage of custodial failures (that is, persons on parole who disappeared or committed crime) was about 20 per cent. of those actually paroled. Considering the salvage nature of our work and the kind of material we deal with, this would appear to be a fair figure and means that almost 80 per cent. of those paroled made good, at least during the period of supervision, and from past experience it can be expected that the majority of these will continue to succeed. We had to return 31 persons to the institutions from which they were paroled, because their behaviour under supervision was not such as made it wise to continue them further on parole.

As in past years the failures fall into two classes: those who broke faith when there was nothing apparent in their past history that would lead one to expect failure, and those who when paroled were considered rather doubtful risks, but to whom it was considered proper to give a chance of reformation, the indeterminate sentence having been given by the court for that purpose. The fundamental aims of the board are the re-establishment of prisoners and the protection of the public. The experience of the board teaches that in many cases the parole of a prisoner is more likely to accomplish these objects than his retention in prison until the end of his full sentence.

Every prisoner is paroled under certain specific and strict conditions. One of these essential conditions is that work must be ready so that he will go direct from the institution to definite employment and immediately begin earning his living. In a number of cases the friends or relatives of the prisoner are able to secure such guarantees and materially assist our officers in locating the prisoner in a satisfactory place. In hundreds of cases our officers, while they are under no legal obligation to do so, obtain employment for prisoners with little or no help from relatives or friends. Over 500 jobs were secured for prisoners directly by our officers and either directly or indirectly they found work for the 615 prisoners paroled during the year.

If all conditions of parole are not faithfully kept the board does not consider it safe either for the public or the prisoner to keep him outside on parole. He is with regret sent back, but no prisoner is returned to the institution without urgent cause, as we believe that our duty is to guide as many as possible into civil re-establishment. Sometimes warnings and caution are effective. When these fail there is only one recourse and that is return to close custody.

The personnel of the board is as follows: Chairman, Mr. G. S. Matthews; vice-chairman, Mr. W. A. Evans; vice-chairman, Judge Emerson Coatsworth; Mr. J. B. Tudhope, Mr. D. Miller, Judge J. F. McKinley, Dr. F. C. Grenside, Mrs. G. A. Brodie and Mr. G. B. Woods.

The executive staff consists of Dr. Alfred E. Lavell, Secretary and Chief Officer; Mr. E. J. Etherington and Mr. T. D. Bell, parole inspectors. We cannot too highly commend the loyalty and efficiency of our officers and staff. The clerical staff consists of four stenographers and a filing clerk. The increase in our work demands a larger staff as soon as adequate office space is given us.

Signed on behalf of the Ontario Board of Parole.

G. S. MATTHEWS,
Chairman.

REPORT OF THE COMMISSIONER FOR THE EXTRA-MURAL
EMPLOYMENT OF SENTENCED PERSONS (OFFENDERS
AGAINST DOMINION LAW) FOR YEAR ENDING
OCTOBER 31, 1929

The powers and duties of the Commissioner are stated in the regulations approved by the Lieutenant-Governor-in-Council, September 19, 1922, and given in each specific case by an Order-in-Council. The statutory basis is Cap. 163, R.S.C. (1927), secs. 13-15, 49 and 61.

GAOLS

13. The Lieutenant-Governor of any province may, from time to time, make regulations for the purpose of preventing escapes and preserving discipline in the case of prisoners in any common gaol or prison employed beyond the limits of such common gaol or prison.

14. After such regulations are made, the Lieutenant-Governor may, from time to time, direct or authorize the employment, upon any specific work or duty, beyond the limits of any common gaol or prison, of any prisoner who is sentenced to be imprisoned with hard labour in such gaol, for any offence against any law of Canada.

15. Every such prisoner shall, during such employment be subject to such regulations and to all the rules, regulations and discipline of the gaol or prison, so far as applicable.

16. No such prisoner shall be so employed, except under the strictest care and supervision of officers appointed to the duty.

ONTARIO REFORMATORY AND INDUSTRIAL FARMS

49. The Lieutenant-Governor may, from time to time, authorize, direct or sanction the employment upon any specific work or duty without or beyond the limits of the Ontario reformatory or an industrial farm of any of the prisoners confined or sentenced to be imprisoned therein or transferred thereto, as herein provided.

2. All such prisoners shall, during such last-mentioned employment, be subject to such rules, regulations and discipline, as are approved by the Lieutenant-Governor in that behalf.

MERCER REFORMATORY

61. The Lieutenant-Governor may, from time to time, authorize, direct or sanction the employment upon any specific work or duty without or beyond the limits of the reformatory or industrial farm of any female confined or sentenced to be imprisoned or transferred thereto as herein provided.

All such prisoners shall, during such last-mentioned employment be subject to such rules, regulations and discipline as are approved by the Lieutenant-Governor in that behalf.

STATISTICAL RECORD

	1928-1929	Total for 9 years
Permits put into effect.....	259	1,925
Custodial failures.....	30	103
Aggregate days served outside.....	46,991	239,004
Wages earned, all going solely to prisoners and families (cir.).....	\$ 94,000 00	\$517,000 00
Total cost of system except for service of parole office (cir.).....	800 00	7,100 00
Saving to province in maintenance (cir.).....	40,000 00	241,000 00

Of the custodial failures 15 disappeared and escaped, and 15 were reconvicted. Half of the custodial failures were caught and re-sentenced. All the rest of those placed outside to work on extra-mural permit did well except a few whom it was considered wise for various reasons to place back inside the institution.

It will be noted that the total number of custodial failures for the nine years is 5.4 per cent. For reasons rather difficult to determine, this year was an unusual one custodially. As convictions for crime increased in Ontario during the year, and parole failures increased, so also the number of failures this year among those placed outside to work in custody on permits was larger than usual, in spite of the fact that the same caution was exercised as in former years. All of the failures were as out of a clear sky. The files of these men have been carefully examined and there appears to have been no sign of impending trouble until suddenly the prisoner either disappeared and escaped or committed a new crime.

In addition to the invaluable assistance of the Board of Parole and its staff, the Commissioner continues to receive most efficient and hearty co-operation from all quarters. The occasional criticism that was heard at the beginning of the system some years ago appears to have almost entirely ceased as officials and the public generally have learned to know more about its policy and practice. The criticism at first was based on the assumption that prisoners were released. It is now understood that the inmates dealt with remain strictly as prisoners under control for their full term. It was also thought that insufficient consideration or unwise, ulterior, unrelated factors entered into the system. It is now apparently understood by all that every case is given most careful consideration from an entirely judicial point of view, and action is only taken by His Honour the Lieutenant-Governor when it is believed that the granting of a permit to a prisoner to work outside in custody is entirely just and is in the common interest of the prisoner, his family and the public.

It would appear to be unnecessary at present to go into further details as the exhaustive report for the first five years of the system is on record and it seems unnecessary to repeat what was therein stated. It is the hope of the Commissioner to give a similar detailed report at the close of the next fiscal year when the system will have been in operation ten years.

ALFRED E. LAVELL,
Commissioner.

THE SALVATION ARMY

REPORT OF PRISONS AND POLICE COURTS IN ONTARIO
YEAR ENDING SEPTEMBER 30TH, 1929

*Submitted by Colonel Henry, Chief Secretary, on behalf of
Commissioner James Hay*

In presenting our report of Police Court and Prison Work for the year ending September, 1929, we give God thanks for His help and guidance.

Of course statistics cannot give a full report of the labours and results given by officers and others, but the work is done in the hope that the seed sown will be seen "after many days." In this we are thankful for the evidences of this

fact, in the number of men and women we are constantly coming in contact with who first came under the Salvation Army's influence while in prison or a police court cell.

Our officers are regular visitors at the Langstaff Jail Farm, Women's Farm, Concord, the Mimico Clay Plant Reformatory, the Don Jail, Toronto; the Mercer Reformatory for Women, the Industrial Farm, Burwash; the Guelph Reformatory, also most of the police courts and prisons in Ontario.

In connection with police court and prison work, three men and two women are set apart entirely for this work in Toronto, and Ontario, while several others give part-time service amounting to thousands of hours per annum to police court and prison work.

Several men and women on release are taken care of by the Salvation Army until they obtain steady employment and feel strong enough to resist similar temptations that cause them to get into prison.

Owing to the fact that it is very difficult for a man leaving prison to obtain a situation immediately, the Salvation Army Industrial Home and Free Labour Bureau are able to accommodate these men, finding temporary employment until such time as permanent situations are secured. In this connection I might say that in Ontario employment was found for over 800 of these unfortunate people. Food, clothing and shelter was also provided, and in all cases free of charge to the recipient.

It so happens that the real sufferer, when a married man is sent to prison, is the wife and family, and while the Salvation Army may not be able to do very much to help in this respect yet on our Prison Visitor's recommendation baskets of groceries are sent weekly, or assistance is given to meet the need. In this connection nearly 695 baskets of groceries were sent to the families referred to, also over \$1,000.00 was paid in rents during the year.

In the various prisons of Ontario 1,000 religious services are conducted yearly, and without doubt these meetings have such an influence upon the inmates that cannot help but be for their betterment.

Our women officers regularly visit the Mercer Reformatory, the Women's Farm, Concord, and Police Court, and any inmate who desires a helping hand is given assistance and a home.

There is no doubt that what is done for the man or woman after they leave prison is of much, or more importance, than that which is done for them while in prison.

In this respect I am glad to report that our officers follow up with advice and care, also assistance, to those who are in need of such help.

The following statistics will give some idea of the work accomplished on behalf of the women inmates and the men:

Interviews.....	9,138
Cases given to care of the Salvation Army.....	681
Visits to Police Court.....	1,344
Number of women returned to situations or to friends.....	75
Meals supplied free.....	9,264
Beds supplied free.....	3,675
Garments given free, including boots and shoes.....	1,000
Letters written and telephone calls for prisoners.....	4,925
Visits on behalf of prisoners.....	1,908
Employment secured for prisoners.....	852
Hours spent in prison work by various officers.....	25,987
Services conducted in prisons.....	1,011
Baskets of food for prisoners' families.....	695
Rents paid for prisoners' families.....	\$1,018.00
Periodicals.....	27,391
Christmas treats to inmates.....	1,600

PRISON AND POLICE COURT WORK IN PROVINCE OF ONTARIO

STATEMENT OF INCOME AND EXPENDITURE FOR THE
YEAR ENDING SEPTEMBER 30TH, 1929

To Assistance to Prisoners and Dependents.....		\$6,344 70	
To Expenses of Officers engaged in Prison Work.....			5,723 94
Salaries.....	\$3,897 92		
Rents.....	1,175 47		
Travelling and incidentals.....	650 55		
To Expenses of Officers engaged in Police Court Work:			
Toronto.....			3,354 04
Salaries.....	\$2,027 83		
Rents.....	482 35		
Administration expenses.....	500 00		
Incidentals.....	343 86		
Peterborough.....			678 41
Salaries.....	\$676 20		
Incidentals.....	2 21		
			<hr/>
			\$16,101 09
By Grants:			
Province of Ontario.....		\$5,500 00	
City of Toronto.....		2,028 00	
City of Peterborough.....		674 92	
By Donations.....		99 15	
By Deficity.....		7,799 02	
			<hr/>
			\$16,101 09

TABLE

The following tables cover the Prison Population and other

Name of Institution	In custody Oct. 31st, 1928	Committed during the year	Total number in custody	Discharged on ex- piration of sen- tence	Discharged by ticket-of-leave	Discharged by Parole Board	Discharged by payment of fines	Discharged by re- mission of sen- tence
Ontario Reformatory—Guelph.....	540	910	1,450	427	7	279	2	11
Ontario Reformatory—Mimico.....	145	374	519	138	8	124	13	.....
Industrial Farm—Burwash.....	312	1,439	1,751	1,051	7	129	29	1
Industrial Farm—Fort William.....	81	497	578	436	1	7	46	.....
Industrial Farm—Langstaff (males).....	305	1,806	2,111	1,477	12	9	67	.....
Industrial Farm—Concord (females).....	39	184	223	169	1	6	7	.....
Mercer Reformatory—Toronto (females) ..	188	152	340	148	2	16	.....	.....
Totals.....	1,610	5,362	6,972	3,846	38	570	164	12

No. 1

statistical information of the Ontario Reformatories for the year 1929.

Discharged by order-in-council	Discharged by Minister of Justice	Conditional discharges on bail, etc.	Other reasons	Escaped	Deported	Returned to gaols	Transferred to penitentiaries	Transferred to hospitals for insane	Transferred to provincial institutions	Released on writ of Habeas Corpus	Died while in custody	Remaining in custody, Oct. 31st, 1929
1	2	.....	139	6	52	.....	.....	4	11	.....	2	507
19	.....	.....	2	3	12	.....	2	.....	42	.....	1	155
.....	.....	.....	52	10	23	.....	3	.....	9	.....	8	429
.....	.....	.....	.....	1	.....	31	2	.....	.....	.....	1	53
214	.....	.....	5	1	.....	23	.....	.....	2	.....	10	291
2	.....	2	.....	4	.....	.....	.....	.....	2	.....	.....	30
2	.....	.....	.....	2	2	.....	.....	3	2	.....	1	162
238	2	2	198	27	89	54	7	7	68	.....	23	1,627

TABLE No. 2

Showing Social Conditions

Married.....	1,598
Single.....	3,512
Widowed.....	267

5,377

TABLE No. 3

Showing the Educational Status

Read and write.....	4,865
Illiterate.....	512

5,377

TABLE No. 4

Showing the Habits of Prisoners

Temperate.....	2,046
Intemperate.....	3,297
Drug addicts.....	34

5,377

TABLE No. 5

Showing the Religions of Prisoners

Anglicans.....	1,123
United.....	500
Presbyterian.....	790
Roman Catholics.....	2,180
Others.....	784

5,377

TABLE No. 6

Showing the Length of the Sentences

One month (or less).....	1,630
Two months.....	670
Three months.....	972
Four months.....	155
Five months.....	63
Six months.....	453
Nine months.....	50
Twelve months.....	173
Fifteen months.....	10
Eighteen months.....	28
Two years less one day.....	27
Two years.....	34
Indeterminate.....	1,112

5,377

TABLE No. 7

Showing the Nationalities

Canadian-born.....	3,213
English.....	459
Irish.....	212
Scotch.....	268
United States.....	127
Other nationalities.....	1,098

5,377

TABLE No. 8

Crimes against the Person

Assault.....	150
Cutting, wounding, stabbing and shooting.....	13
Manslaughter.....	4
Murder (attempted).....	1
Rape.....	5
Attempted suicide.....	5
Non-support.....	44
Miscellaneous.....	33

255

Crimes against Property:

Larceny.....	704
Arson and incendiarism.....	3
Burglary and housebreaking.....	224
Forgery.....	46
Fraud and false pretences.....	135
Receiving stolen goods.....	130
Trespass.....	422
Miscellaneous.....	20
	<hr/>
	1,684

Crimes against public morals and decency:

Bigamy.....	10
Inmates of houses of ill-fame.....	25
Keeping houses of ill-fame.....	50
Perjury.....	9
Seduction.....	5
Indecent assault.....	51
Miscellaneous.....	106
	<hr/>
	256

Offences against public order and peace:

Escaping and obstructing constables.....	33
Carrying unlawful weapons.....	16
Drunk and disorderly.....	1,049
Breaches of the liquor law.....	1,022
Breaches of Inland Revenue Act.....	20
Breaches of Drug Act.....	51
Vagrancy.....	890
Other offences.....	101
	<hr/>
	3,182

Grand Total.....	5,377
------------------	-------

TABLE No. 9

Showing Occupation of Prisoners when Committed

Agricultural.....	510
Commercial.....	965
Domestic.....	491
Labourers.....	2,163
Mechanics.....	921
Professional.....	37
No occupation.....	327
	<hr/>
	5,377

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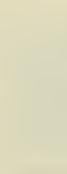
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DEPARTMENT OF HEALTH

Fifth Annual Report

OF THE

Department of Health

Ontario, Canada

FOR THE YEAR

1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER, No. 11, 1930



ONTARIO

TORONTO:

Printed and Published by Herbert H. Ball, Printer to the King's Most Excellent Majesty

1930

DEPARTMENT OF HEALTH

Full Report 1917

Department of Health



TO HIS HONOUR WILLIAM DONALD ROSS, ESQUIRE,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I herewith beg to present for your consideration the Fifth Annual Report of the Department of Health for the year 1929.

Respectfully submitted,

FORBES GODFREY,

Minister of Health and Labour.

Toronto, January 30th, 1930.

TO THE HONOURABLE FORBES GODFREY, M.D.,

Minister of Health and Labour.

SIR,—I have the honour to submit for your approval the Fifth Annual Report of the Department of Health, made in conformity with and under the provisions of The Public Health Act, for the year 1929.

I have the honour to be, Sir,

Your obedient servant,

W. J. BELL,
Deputy Minister of Health.

Toronto, January 30th, 1930.

DEPARTMENT OF HEALTH

Minister

HONOURABLE FORBES GODFREY, M.D.

Deputy Minister

W. J. BELL, M.B.

John W. S. McCullough, M.D., C.M., D.P.H..... Chief Inspector of Health
Adam H. Wright, B.A., M.D., M.R.C.S., Eng..... Associate in Public Health Education

District Officers of Health

District: No. 1. Thos. J. McNally, M.D., C.M., D.P.H..... London
No. 2. J. J. Fraser, M.D., D.S.O..... Guelph
No. 3. Daniel A. McClenahan, M.D., C.M., D.P.H..... Hamilton
No. 4. N. H. Sutton, M.B., D.P.H..... Peterborough
No. 5. Paul J. Moloney, M.D., C.M..... Ottawa
No. 6. W. Egerton George, M.D., D.P.H..... North Bay
No. 7. G. L. Sparks, M.D., D.P.H..... Fort William
No. 8. Hugh W. Johnston, M.D..... Sault Ste. Marie

Sanitary Engineering Branch

A. E. Berry, M.A.Sc., C.E., Ph.D..... Director
A. V. Delaporte, B.A.Sc., Chem. E., F.C.I.C..... Chemist in Charge of Experimental Station
O. V. Ball, B.A.Sc..... Assistant Sanitary Engineer
G. A. H. Burn, B.A.Sc..... Assistant Sanitary Engineer
E. W. Johnston, B.A.Sc..... Assistant Sanitary Engineer
A. T. Byram, B.A.Sc..... Assistant Sanitary Engineer

Preventable Disease Branch

R. R. McClenahan, B.A., M.B., D.P.H..... Director
A. L. McKay, B.A., M.B..... Epidemiologist
G. C. Brink, M.B..... Clinical Specialist
D. G. Wilson, M.B..... Clinical Specialist
Agnes Haygarth, Reg. N..... Social Service Nurse

Child Hygiene Branch

John T. Phair, M.B., D.P.H..... Director
Ella J. Jamieson, Reg. N..... Chief School Nurse

Laboratories Branch

Andrew MacNabb, B.V.Sc..... Director
A. H. Bonham, B.A.Sc., F.C.I.C..... Chemist

Branch Laboratories

A. J. Slack, Ph.C., M.D., D.P.H.....	London
James Miller, M.D., D.Sc., F.R.C.S. (Edin.) Director.....	Kingston
N. O. Thomas, B.A., M.B., Director.....	Fort William
N. F. W. Graham, M.B., Director.....	Sault Ste. Marie
W. A. R. Michell, M.B., D.P.H., Director.....	North Bay
C. B. Waite, M.D., Director.....	Peterborough
F. L. Letts, M.B., D.P.H., Director.....	Ottawa

Industrial Hygiene Branch

J. G. Cunningham, B.A., M.B., D.P.H.....	Director
R. M. Hutton, B.A. (Oxon.).....	Literary Research
A. R. Riddell, B.A., M.B., D.P.H.....	Clinical Specialist
F. M. R. Bulmer, M.B., B.A.Sc., Med.....	Special Research
H. E. Rothwell, B.A.Sc., F.C.I.C.....	Chemist
Alex. R. White.....	Chief Sanitary Inspector

Sanitary Inspectors

D. McKee.....	Sudbury
J. Richardson.....	North Bay
W. C. Millar.....	Fort William
R. B. McCauley.....	Sault Ste. Marie
Hugh McIntyre.....	Cochrane

Dental Services Branch

F. J. Conboy, D.D.S.....	Director
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Vital Statistics Branch

S. J. Manchester.....	Director
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Nurse Registration Branch

A. M. Munn, Reg. N.....	Inspector of Training Schools for Nurses
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Public Health Education Branch

Mary Power, B.A.....	Director
E. H. Jones.....	Exhibits and Films

Honourary Consultants

Public Health Administration.....	J. G. Fitzgerald, M.D., F.R.S.C.
Pediatrics.....	Alan Brown, B.A., M.B.
Obstetrics.....	Wm. B. Hendry, M.D., D.S.O.
Oral Hygiene.....	Harold Keith Box, D.D.S., Ph.D., F.A.A.T., F.A.C.D.

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ANNUAL REPORT

OF THE

Department of Health

of the Province of Ontario

For the Year Ending December 31st, 1929

A RESUME OF THE WORK OF THE DEPARTMENT DURING THE YEAR

Legislation passed in the 1929 Session of the Legislature, consisted of—

I. "An Act to amend the Vital Statistics Act," whereby section 33 of The Vital Statistics Act was amended by adding the following sub-section,—

"3. In a city having a population of 100,000 or over, the Division Registrar may, with the approval of the Registrar-General, appoint such sub-registrars as may be necessary for the more convenient carrying out of the provisions of this Act for the registration of deaths and for the issuing of burial permits."

II. "An Act for the Better Prevention of Silicosis Among Stone Workers."

1. This Act may be cited as *The Silicosis Act, 1929*. Short title.

2. In this Act "Silicosis" shall mean silicosis of the lungs (a fibroid condition of the lungs caused by the inhalation of silica dust). "Silicosis,"—
meaning of.

3. A person shall not be employed in the cutting, polishing or finishing of granite who is not the holder of a subsisting certificate given by a medical examiner under this Act that such person is medically fit to be employed in such occupation. Certificate as
to fitness.

4. Every certificate issued under this Act shall be for such period and shall be renewable upon such conditions as may be prescribed by the regulations. Term and
renewal of
certificate.

5. The owner, manager, proprietor or superintendent of any works in which the cutting and polishing of granite is carried on shall provide such masks and other appliances to be used by the persons employed in such works for their protection against silicosis as may be approved from time to time by the Minister of Health. Masks,
etc., to be
supplied.

Precautions
to be taken.

6. Every such owner, manager, proprietor and superintendent shall at all times take such precautions and use such appliances as may be directed by the Factory Inspection Branch of the Department of Labour.

Regulations.

7. The Lieutenant-Governor in Council may make regulations for the appointment of medical examiners for the purposes of this Act and for prescribing the methods and procedure to be adopted for the examination of applicants for certificates of fitness, and the fees payable for such examination.

Regulations
as to pro-
tection of
granite
workers.

8. The Minister of Health with the approval of the Lieutenant-Governor in Council may make such regulations from time to time as may be deemed desirable for the better security of workmen employed in cutting, polishing and finishing granite and for their protection against silicosis or other industrial diseases which may be contracted in pursuing their occupation.

Extension of
operation
of Act.

9. The Minister of Health with the approval of the Lieutenant-Governor in Council may extend the operation of this Act so as include workmen employed in cutting, polishing, finishing or grinding any stone or substance other than granite, and may extend the application of any regulations to the works in which they are employed.

Commence-
ment of Act.

10. This Act shall come into force on a day to be named by the Lieutenant-Governor by his Proclamation.

III. "An Act to Amend the Registration Nurses Act" by which the clause lettered "b" in section 1 of the Act is repealed and the following substituted therefor:

"(b) A graduate of such training school, upon the payment of the fees prescribed by the regulations, shall be entitled to registration in a register kept for that purpose under the direction of the Minister of Health, and a person while so registered may be designated "Registered Nurse."

The only regulations passed during the year were regulations permitting the Board of Examiners, appointed under authority of the Embalmers and Funeral Directors Act, to subpoena witnesses to take evidence under oath and to compel the production of such documents or other things as may be necessary for the purposes of such investigation as may be conducted by the Board.

Changes in the personnel of the technical staff during the year have been very few. Dr. R. P. Hardman has been appointed to take the place vacated by Dr. A. L. McKay on Dr. McKay's promotion from Assistant Director to Director of the Division of Preventable Diseases and Epidemiologist for the Department.

Dr. James W. Bell, who was appointed to take charge of Bacteriology in the Main Laboratory, was transferred to Fort William to take the place of Dr. N. O. Thomas, deceased.

E. C. Beck, B.S.A., was appointed to take charge of bacteriology, taking the place made vacant by the transfer of Dr. Bell.

We regret to chronicle the death of Dr. N. O. Thomas, late director of the laboratory at Fort William. Dr. Thomas was an efficient, painstaking and conscientious laboratory worker. His death is sincerely regretted by his confreres in the Department.

It is gratifying to note that the Division of Industrial Hygiene of the Department is developing for itself a reputation that is not only national, but international. During this past year, as in former years, this division of the department has been studying very intensively certain aspects of the silicosis problem, and Dr. J. Grant Cunningham, Director of the Division, has been invited by the League of Nations to attend the International Silicosis Conference, to be held in August, 1930, in Johannesburg, S.A., as the representative of the Dominion of Canada.

It has been interesting to observe throughout the year the increased and more intelligent interest manifested in the public health aspects of the milk supply, especially on the part of producers and distributors.

The installation of protected municipal water supplies and water treatment plants have shown a satisfactory increase throughout the year. The same has also been true of municipal sewerage and sewage disposal plants.

The year's record in communicable disease has been satisfactory, only one major outbreak of undue proportions having occurred. This was the province-wide outbreak of poliomyelitis which occurred from early September until the middle of December, 1929. Over five hundred cases were reported. Of this number we had comparatively few deaths, and only a small proportion of the cases had permanent paralysis. A full account of this outbreak and methods adopted for control and treatment are contained in the report of the Epidemiologist and Director of the Division of Preventable Diseases.

The only feature that one would care to mention in this resume is the generous manner in which recovered convalescents came forward and contributed their blood for the preparation of convalescent serum, which was so freely used in the outbreak.

The expenditure of the Department for the year on biological products and insulin, has shown a great increase, but in view of the results obtained, one feels that the expenditure is fully justified.

Our expenditure on the maintenance of patients in hospital has also increased. This expenditure which is practically all for tuberculosis, we feel is quite justified, because in controlling the spread of tuberculosis it is of the first importance that open cases be removed to the sanatorium so that they may not menace the health of those in their immediate environment.

Rabies still continues a serious menace to the health and safety of the people of this province. During the year two deaths occurred from bites on the face. The department is supplying freely anti-rabic treatment for the use of humans who have been exposed to the dangers of infection through contact with infected animals.

In the latter part of October, 1930, the Department made a noteworthy contribution to the subject of Child Health, by the publication of a new book entitled "The Baby." It outlines in popular language the care of the child from infancy to the age of six years. The publication has had a very wide distribution, and has been most favourably commented upon over the whole American continent. Over forty thousand copies were distributed within three months of its appearance and these were mostly on request. The publication reflects very great credit on the Divisions of Child Hygiene and Public Health Education, by whom it was brought out.

A detailed account of the activities of the Department follows, allocated according to the organization of the Divisional activities.

DIVISION OF PREVENTABLE DISEASES

A. L. MCKAY, B.A., M.B., D.P.H., Director.

G. C. BRINK, M.B., Physician-in-Charge, Diagnostic Chest Clinic.

The following is a report of the activities of the Division of Preventable Diseases for the year ending December 31st, 1929:

I. COMMUNICABLE DISEASE CONTROL

Typhoid Fever.—The incidence of typhoid for the year, notwithstanding two outbreaks that assumed epidemic proportion, was lower than it had been for the average of the previous six years. The first epidemic to occur in the year was at Essex in the month of February. Forty-two cases developed in this epidemic with no deaths. When the investigation was instigated it was difficult to trace as to source. Both milk and water were possible sources, and only after several days was it possible to rule out milk as a factor. Collaborating with the Sanitary Engineering Division the source was finally traced to a contaminated water supply. It was found that cracks in the reservoir had allowed sewage to seep in from a nearby storm sewer, and as the water was not being chlorinated at that time, the town water was proven to be the source of the infection. The reservoir was repaired and the water ordered to be chlorinated.

The second outbreak occurred in April amongst settlers on the outskirts of Kapuskasing. Twenty-eight cases were discovered, and upon investigation it was found that all of them had been drinking water from a contaminated stream. No cases were found to have originated in the town where the water supplied was filtered and chlorinated. These settlers who contracted the disease had ordinarily used water from dug wells and had had no cases previously, but these wells had become dry early in February and they had used water from the stream which ran by their houses. This stream was subject to gross pollution from privies situated near to the banks.

A third small outbreak of eight cases was investigated at Cornwall. Here the source of infection was also proven to be water. The water used for drinking purposes in one of the industrial plants was contaminated by a cross-connection of raw river water which had been left open. All cross-connections were ordered to be cut.

A fourth outbreak that had spread over several years was traced to an individual carrier who had been supplying milk to a creamery at Ameliasburg. Repeated laboratory tests showed that this individual was excreting the typhoid organism. This individual was ordered to discontinue shipping milk for human consumption in any form.

Undulant Fever.—Routine examination by the laboratories of blood samples submitted for agglutination brought to light many further cases of this disease. Each was investigated by this division with the co-operation of the attending physicians. Thirty-seven cases upon investigation showed that in all instances the ingestion of raw milk from cows who had suffered from contagious abortion was the probable source of infection. It would seem that there are many herds

in the province suffering from contagious abortion, and that the most feasible method of preventing this infection spreading to mankind is by the more general adoption of efficient pasteurization.

Smallpox.—During the first six months of the year smallpox was more prevalent than the average for the previous six years. There was no widespread epidemic of the disease, the cases being reported mostly in small numbers from widely distributed municipalities. Prompt measures for control instituted by local authorities in isolation, quarantine and vaccination, effectively checked any possibility of the widespread outbreak.

Diphtheria.—The incidence of diphtheria for the past year has followed the average by month for the past six years, until the middle of August, when a sharp increase in the number of cases is observed. This increase persists throughout September, when more than double the number of cases for the month are reported. In October the incidence returns to normal, with another slight rise about the middle of the month, returning to below the level of the mean rate for December. Taking into consideration the slightly lower mean for the first half of the year and straightening out an average for the year, there is found to be a slightly higher number of cases for 1930 than the year previous.

While much has been accomplished in the past toward immunization of diphtheria susceptibles, concentrated efforts toward this end should be taken, to make 1930 a year of fewer cases and deaths.

Scarlet Fever.—The monthly incidence has followed very closely the average for the past five years, with a slight increase over the past year, with fewer deaths.

Whooping Cough.—The incidence of whooping cough is slightly lower this year than the year previous, with a decrease of 600 in the number of cases, and slight decrease in deaths. The death rate for scarlet fever and whooping cough is about the same for 1929, and yet scarlet fever is generally regarded as a major disease, while whooping cough is still placed in the minor role.

Poliomyelitis.—During the late summer and fall months of 1929 there occurred in Ontario one of the most severe and widespread epidemics of poliomyelitis ever recorded in this province. This epidemic was not altogether unexpected. Previous years had shown outbreaks reaching epidemic proportion in various of the western provinces. During 1926 and 1927, British Columbia and Alberta had suffered from epidemics of poliomyelitis and during 1928 Manitoba had an epidemic of 435 cases. Owing to the sweep eastward of this disease, it was considered probable that 1929 would be a poliomyelitis year in the Province of Ontario. Such proved to be the case.

The experience learned from the epidemic in Manitoba, where poliomyelitis convalescent serum was used with such marked beneficial results, led the Department of Health of Ontario to profit by this experience, and to prepare early for such an outbreak.

COLLECTION AND DISTRIBUTION OF SERUM

The Honourable Forbes Godfrey, Minister of Health of Ontario, sanctioned the collection and preparation of convalescent serum early in the year 1929. Lists of recovered cases of poliomyelitis which had occurred during the previous five years were obtained from the Department of Public Health, Toronto. Letters were sent to the parents of these children appealing for donors and explain-

ing the method used in the collection of the blood and the benefits that might accrue to others from its use. A fairly good response resulted from this appeal. The donors were remunerated at the rate of fifteen (\$15) dollars for each blood donation. This work commenced in March, 1929. In this way, by the middle of July, over a litre of serum was available for use.

The blood was collected as follows: A 250 centrifuge bottle was fitted with a two-hole stopper, and in the bottle was placed a coil of aluminum wire. This coil of wire was used to hasten the shrinkage of the clot. Through each hold of the stopper was put a piece of glass tubing, to just $\frac{1}{2}$ inch below the level of the cork in one instance and just to the orifice in the cork in the other instance. To this latter glass tubing was attached a rubber tubing of 12 inches in length, fitted with a glass mouthpiece. To the former glass tubing was attached a piece of rubber tubing of 12 inches in length, fitted with a glass window, and on the end with an adapter and a needle of 18 or 19 gauge, $1\frac{1}{2}$ inches in length. The whole outfit was wrapped in brown paper with a solid cork to fit the neck of the bottle, and steam sterilized for thirty minutes at fifteen pounds pressure. This gave an outfit which could be carried anywhere and used without subsequent sterilization. The blood was collected from a suitable vein at the bend of the elbow by applying a tourniquet which was left in place until the collection of blood was completed. Mouth suction kept up a partial vacuum within the bottle while the blood was being drawn.

After the blood was collected the solid stopper was placed in the bottle and it was allowed to stand for several hours at room temperature, and then placed in the ice chest over night.

The bottles were centrifugated and the serum separated several times in order to obtain all serum possible (approximately 50 per cent.). Tricresol was added to a percentage of 0.25; this throws down a precipitate. After filtration through paper pulp in a Buchner filter, the serum was filtered through a Berkefeld candle. The filtrate was tested for sterility and filled in 10 c.c. vials. The filled vials were again tested for sterility before the serum could be released for distribution.

The preparation and ampouling of the serum was generously undertaken by the Connaught Laboratories, University of Toronto.

After the epidemic appeared with some severity in August it was felt that the supply of serum on hand would not be sufficient. Assistance at this time was given by the Department of Public Health of Toronto, and also by the Hospital for Sick Children. The nurses of the Health Department made calls on known recovered cases of the disease, explained the urgency of the need and directed them to the Hospital for Sick Children where clinics were held for collecting the blood. The outfits as used by the department were supplied to the hospital at this time. The recompense to donors was changed to a basis of \$5 for every 50 cc. with a maximum of \$20 for 200 cc's. Even with this assistance the supply of serum was still not adequate for future needs, and clinics were organized through the efforts of the local medical officers of health throughout the province at Hamilton, Brantford, London, St. Catharines, Niagara Falls, Kingston, Gananoque, Eganville, Cornwall, North Bay, Parry Sound, Sturgeon Falls, Sudbury, Thessalon, Sault Ste. Marie, Guelph, Kitchener, Oshawa, Sprucedale, Fort William, Port Arthur, Winchester, Arnprior, Almonte, Peterborough, Iroquois, Williamsburg, Kars and North Gower. In each instance an officer of the Department carried out the work.

The City of Ottawa, which had 176 of the cases reported, undertook the collection and preparation of serum for their own needs. This was of material assistance to the department, in that it released for other points in the province the supply of serum which was on hand.

All of the laboratories of the Department of Health acted as distributing centres for the serum, viz., at Ottawa, Peterborough, Kingston, Toronto, London, Sault Ste. Marie, Fort William and North Bay. As well as these centres the medical officers of health in various cities also served as distributing depots, viz., Sudbury, Niagara Falls, Fort Frances and Hamilton.

Numerous requests were received from physicians to have a supply of this serum on hand in their own offices. It was impossible to comply with these

requests as much of the serum would have been wasted and the supply would have needlessly been exhausted. Physicians were urged to telegraph or telephone to their nearest distributing centre when a case was diagnosed; a supply of serum was then sent with the utmost possible despatch. The number of cases which were shown to have received the serum on the first day of illness bear witness to the despatch with which the serum was forwarded from the various centres.

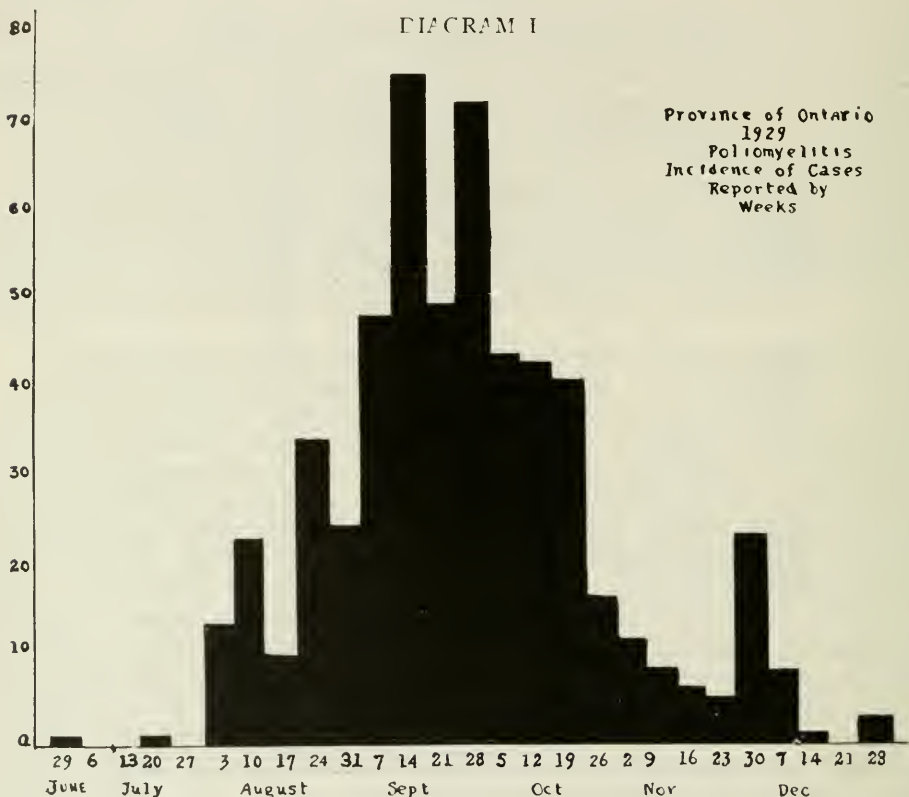
TABLE I.
CASES AND DEATHS ACCORDING TO DATE OF REPORT

Week Ending	Cases	Deaths
June 29.....	1	0
July 6.....	1	
July 13.....	1	
July 20.....	0	
July 27.....	0	
Aug. 3.....	14	9
Aug. 10.....	23	
Aug. 17.....	10	
Aug. 24.....	34	
Aug. 31.....	25	
Sept. 7.....	49	11
Sept. 14.....	75	
Sept. 21.....	48	
Sept. 28.....	72	
Oct. 5.....	43	6
Oct. 12.....	42	
Oct. 19.....	40	
Oct. 26.....	16	
Nov. 2.....	11	0
Nov. 9.....	8	
Nov. 16.....	6	
Nov. 23.....	5	
Nov. 30.....	23	
Dec. 7.....	8	12
Dec. 14.....	1	
Dec. 21.....	0	
Dec. 28.....	3	
June 22—Dec. 28.....	558	26

The department issued a circular early in August, which was sent to every practising physician in the province, indicating in succinct form the salient

features in the early diagnosis of poliomyelitis, the importance of early diagnosis for treatment, and the way to obtain serum, urging the use of the telephone or telegraph.

With each package of convalescent serum was enclosed a direction sheet for the administration of the serum, and also a questionnaire form with the request that this form should be returned to the department after completion by the physician. The manner in which the physicians responded to this request was most encouraging, and it is through the co-operation of the physicians in this respect that this report was made possible.



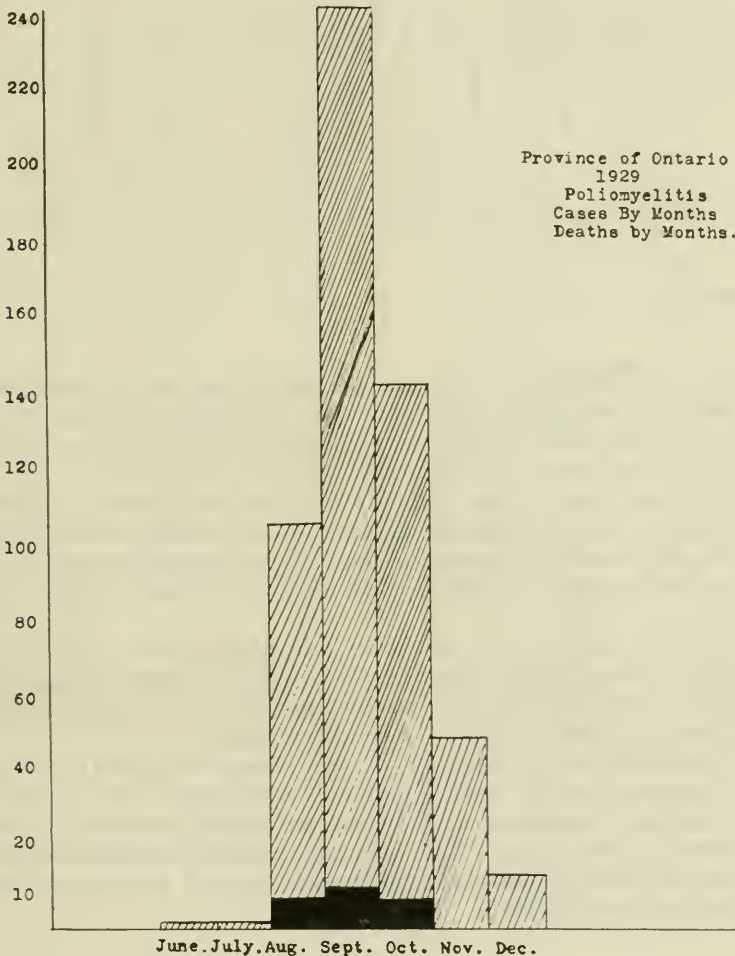
Acknowledgment is also made of the excellent report* of the cases treated in Ottawa by Dr. T. A. Lomer, M.O.H., and Dr. W. T. Shirreff, Superintendent of Strathcona Hospital, Ottawa. This report is a study of 176 cases treated in that city, and through the generosity of the authors these cases have been included in this study of the disease as it occurred throughout the whole province. Acknowledgment is also tendered to Dr. Alan Brown, for making available the records of the cases treated at the Hospital for Sick Children, Toronto.

EPIDEMIOLOGICAL FINDINGS

The cases of and deaths from poliomyelitis as reported to the Department from the week ending June 29th to week ending December 28th, are shown in table I and diagrams I and II. There was a total of 558 cases, being a rate of 17.3 per 100,000 population for that period or a rate of approximately 35 per

100,000 per annum. There were several early sporadic reported cases, two in January, two in June, and two reported deaths in February, one in March and two in June. With the first week in August a marked increase in cases was reported. These rose rapidly to a peak during the last three weeks of September. From this point the decline in cases was less rapid than had been the rise to the peak, and even during the last week in November and in December cases were still reported. The idea of temperature conditions, such as the appearance of

DIAGRAM II



the first frost bringing an end to the epidemic, is not borne out by these figures. The majority of cases, 369 out of 558, however, occurred from the first week in September to the third week in October. Comparing this incidence with the Manitoba experience of the previous year, although the peak occurred at approximately the same time of the year, the epidemic in Ontario was slower in its decline and of longer duration, and more cases occurred after the peak was reached than before it. Table II exemplifies the fact that this distribution is typical of what has occurred previously in this province; for the years, 1923-1928

inclusive, the peak of the cases has occurred in September, and the decline in the number of cases has been slower than the rise to the peak number; also sporadic cases do occur throughout the year.

TABLE II

CASES AND PERCENTAGE DISTRIBUTION BY MONTHS FOR THE YEARS 1923 TO 1928 AND FOR 1929

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1923.....	2	2	0	4	0	0	2	0	6	0	1	2	19
1924.....	0	0	0	0	0	0	0	3	35	20	20	6	81
1925.....	2	4	1	0	5	0	4	19	37	17	3	0	92
1926.....	2	0	0	0	0	2	0	5	22	27	8	2	68
1927.....	0	0	0	0	0	0	2	3	10	21	7	6	49
1928.....	2	0	0	2	3	1	3	3	27	23	16	4	84
Total.....	8	6	1	6	8	3	11	33	137	108	55	20	393
Percentage....	2.0	1.7	0.2	1.7	2.0	0.5	2.6	8.3	34.7	27.3	14.0	5.0	100
1929 Cases....	2	0	0	0	0	2	1	106	244	141	53	12	561
1929 Percentage	0.3	0	0	0	0	0.3	0.1	18.9	43.6	25.2	9.5	2.1	100

The cases distributed by age, and the percentage each group forms of the total as shown in Table III, bring out a point again which has made itself manifest in the more recent epidemics, viz., that poliomyelitis is not a disease of infancy. In this series only 5.8 per cent. of the total number of cases were in children under two years of age, and only 62.8 per cent. were in children under ten years of age. The five year age group with the highest percentage was the 5-9 year group. However, all ages up to twenty years showed a significant number of cases, so that the idea of poliomyelitis being a disease of infancy must be altered.

The total number of deaths, as shown in Table III, was twenty-six. In the younger ages the case fatality was highest in the 0-4 years group; higher in the 10-14 and 15-19 groups than it was in the 5-9 group, whereas the greatest number of cases occurred in the last mentioned group.

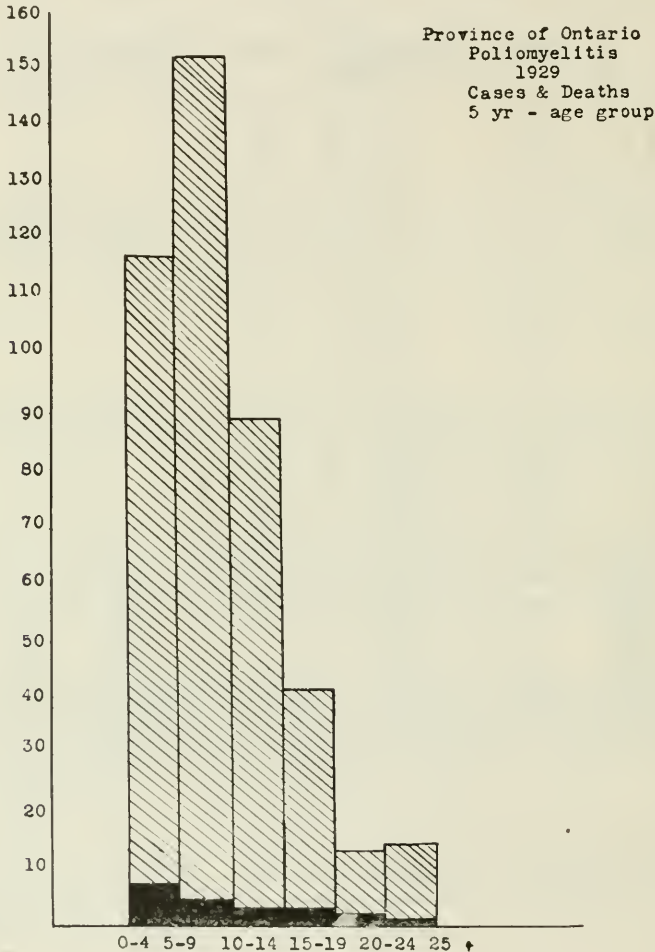
The sex distribution by age of 426 cases is shown in Table IV. Of the total number of cases studied 264 or 61.9 per cent. were males, and 162, or 38.1 per cent. were females. Considered in five year age groups the males attacked were in the majority in each group. This is in agreement with reports of other epidemics. No adequate explanation is offered as to why males are attacked in greater numbers than females.

TABLE III
CASES AND DEATHS

CASES			DEATHS		
	Number	Percentage Distribution	Number	Percentage Distribution	Case Fatality
0-1	4	.9	0		
1	20	4.9	3		
2	31	7.3	4		
3	31	7.3	0		
4	30	7.0	1		
0-4	116	27.4	8	30.7	6.8
5	29	6.7	0		
6	33	7.7	1		
7	26	6.0	0		
8	33	7.7	3		
9	30	7.0	1		
5-9	151	35.4	5	19.3	3.3
10	22	5.5	2		
11	18	4.0	1		
12	15	3.5	1		
13	20	4.9	0		
14	14	3.2	0		
10-14	89	20.9	4	15.3	4.4
15-19	42	10.0	4	15.3	9.5
20-24	13	3.0	3	11.6	23.0
25-49	15	3.5	2	7.8	13.3
Total . . .	426	100.	26	100.	6.1

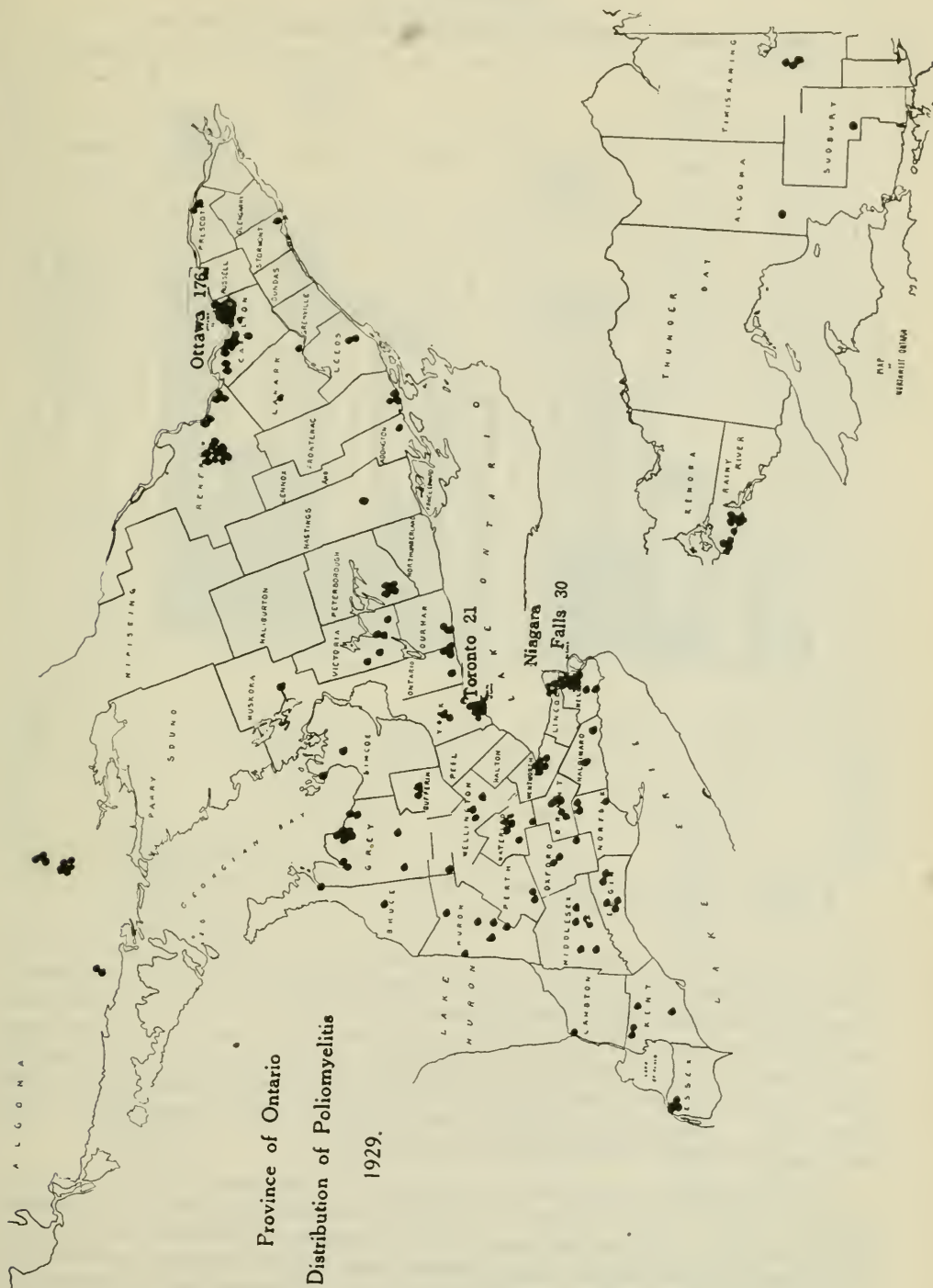
The distribution by locality of the cases reported is shown in the maps. There were three counties which suffered severely from this epidemic. Carleton County, and especially the City of Ottawa, with 176 cases, suffered most severely. Welland County and the City of Niagara Falls and Grey County were next in order of number of cases reported. The only large area which escaped infection was that in Haliburton, Hastings, Lennox and Addington and Frontenac. No explanation can be offered as to why these counties remained practically free of

DIAGRAM III



the disease. The northern parts of these counties are thinly settled, but in another thinly settled section nearby (the County of Renfrew) there were thirteen cases reported.

The distribution of the cases into rural and urban populations (urban being considered as 5,000 and over) and also the division into age and sex groups are shown in Table IV. The urban incidence in this epidemic is higher than the rural with 69.6 per cent. of the cases. (The distribution of the population of the province according to the report of the Registrar-General for 1927 is rural, 53.23 per cent., and urban, 46.77 per cent.). The fact that 176 of the cases occurred in



Province of Ontario
Distribution of Poliomyelitis
1929.

TABLE IV
CASES ACCORDING TO AGE, SEX, AND RURAL AND URBAN DISTRIBUTION

Age	URBAN						RURAL						Total	
	Male		Female		Male and Female		Male		Female		Male and Female			
	No.	%	No.	%	Total	%	No.	%	No.	%	Total	%	No.	%
0	2	1	1	0.8	3	.9	1	1.2	0	0	1	.8	4	.9
1	11	5.9	6	5.3	17	5.2	2	2.4	1	2.1	3	2.3	20	4.9
2	12	6.4	9	9.7	21	7.1	5	6.2	5	10.6	10	8.5	31	7.3
3	14	7.8	10	8.8	24	8.1	4	4.8	3	6.4	7	5.4	31	7.3
4	16	8.7	8	2.0	24	8.1	6	7.5	0	0	6	4.6	30	7.0
0-4	55	29.6	34	31.5	89	29.4	18	21.9	9	19.1	27	21.6	116	27.4
5	15	8.3	8	7.0	23	7.8	4	4.8	2	4.2	6	4.6	29	6.7
6	13	7.1	8	7.0	21	7.5	7	8.7	5	10.6	12	9.2	33	7.7
7	10	5.1	8	7.0	18	6.1	5	6.2	3	6.4	8	6.2	26	6.0
8	18	10.	11	9.8	29	9.8	3	3.6	1	2.1	4	3.1	33	7.7
9	13	7.2	7	6.8	20	6.7	7	8.7	3	6.4	10	7.7	30	7.0
5-9	69	37.2	42	37.4	111	37.9	26	31.9	14	29.7	40	30.8	151	35.1
10	8	4.5	8	7.0	16	5.4	3	3.6	3	6.4	6	4.8	22	5.3
11	6	3.3	4	4.8	10	3.6	5	6.2	3	6.4	8	6.2	18	4.0
12	9	4.9	3	2.7	12	4.	3	3.6	0	0	3	2.3	15	3.7
13	8	4.4	6	5.5	14	4.7	1	1.2	5	10.6	6	4.6	20	4.8
14	6	2.3	3	2.6	9	3.	2	2.4	3	6.4	5	3.8	14	3.5
10-14	37	19.4	24	21.9	61	21.7	14	17.	14	29.7	28	21.7	89	21.4
15-19	20	12.8	7	6.8	27	9.	11	13.8	4	8.6	15	11.5	42	9.8
20-24	3	1.0	2	1.8	5	1.7	6	7.5	2	4.3	8	6.2	3	3.0
25-29	1	0.5	2	1.8	3	1.	3	3.6	2	4.3	5	3.8	8	1.8
30-34			1	0.8	1	.3	2	2.4	1	2.1	3	2.3	4	.9
35-39							1	1.2	0	0	1	.8	1	.2
40-44							1	1.2	0	0	1	.8	1	.2
45-49									1	2.1	1	.8	1	.2
	185	100	112	100	297	100	82	100	47	100	129	100	426	100

the City of Ottawa would account for this discrepancy. The remainder of the cases in the province were about equally distributed between rural and urban. It has been variously stated that poliomyelitis is a disease of the rural sections, but this is not borne out by the last two epidemics in Canada, viz., Manitoba and Ontario, where the majority of cases have occurred in the cities and larger towns. The rural cases show a higher proportion in the older groups than do the urban cases. This is in keeping with the findings of other surveys and in this way resembles other common communicable diseases.

Symptomatology.—The order of frequency of symptoms of the disease is shown in Table V and Diagram IV. The symptoms recorded in the Ottawa report were not in entirety the same as those recorded for the other cases occurring in the province, but so far as possible, these are included in this analysis. The symptoms were fairly constant and many diagnoses were confirmed by lumbar puncture, although the department did not insist that lumbar puncture and a cell count should be done to confirm the diagnosis before releasing a supply

DIAGRAM IV

ANALYSIS OF SYMPTOMS

in 393 Cases

in 253 Cases

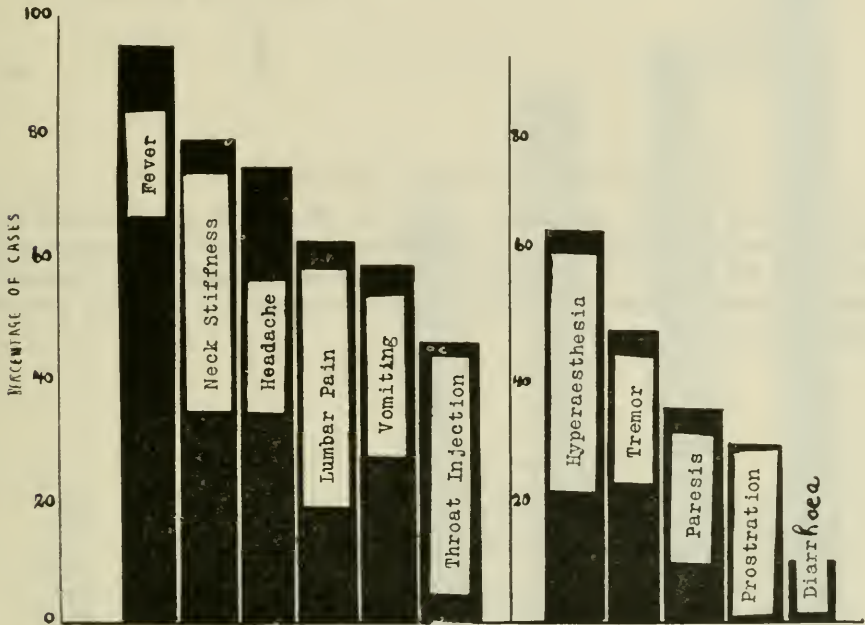


TABLE V

SYMPTOMS RECORDED IN 393 CASES

Symptom	Number	Percentage of Cases
Fever.....	371	94.9
Neck Stiffness.....	308	78.8
Headache.....	305	77.5
Lumbar Pain.....	296	74.5
Vomiting.....	234	59.5
Throat Injection.....	178	45.5

ANALYSIS OF SYMPTOMS

252 CASES

Hyperaesthesia.....	119	47.
Tremor.....	76	30.
Paresis.....	93	36.8
Prostration.....	165	64.5
Diarrhoea.....	30	12.5

of the serum; in many instances this would have been impractical and valuable time would have been lost in the early administration of the serum. However, of the cases studied 254 or 65 per cent. had lumbar puncture done, and in 231, or 91 per cent. of these, cell counts were made. The cell counts were as follows:

TABLE VI
CELL COUNTS OF SPINAL FLUID OF 231 CASES

Cells	No. of Cases	Per Cent.
10- 25.....	67	29.
25- 50.....	45	19.4
50-100.....	65	28.1
100+.....	54	23.5

RESULTS OF SERUM THERAPY

The serum was put up in 10 cc. vials, and 20 cc. was recommended as the dose for intramuscular injection. In some cases where a rise of temperature was noted after the initial fall following the first dose, a second dose of serum was given with better results. Practically all of the serum was given by the intramuscular route.

TABLE VII
SUMMARY OF RESULTS OF SERUM TREATMENT

Total number of cases reported in Province.....	558
Total number of cases known to receive serum.....	387*
Total number of cases known to receive serum with complete recovery...	260
Recovery rate.....	67.1%
Total number cases which were paralyzed when serum was given.....	65
Deducting these 65 cases—recovery rate.....	80.7%
Records received account for 39 cases that did not receive serum.	

The results of serum therapy, with reference to paralysis developing, and in relation to the day of illness on which the first administration of serum took place, are shown in Table VII and Diagram V. The necessity for early diagnosis and immediate administration of the serum is well exemplified. Of the cases who received the serum on the first day of illness all recovered and there were no cases of residual paralysis. Even on the second day of illness 87.7 per cent. completely recovered without paralysis, but with each succeeding day the percentage of recovery without paralysis become smaller and smaller until in those receiving it on the sixth day, 100 per cent. remained paralyzed.

The record of thirty-nine cases who did not receive serum therapy is shown in Table VIII. Four of these cases recovered without paralysis and thirty-five were left with some residual paralysis.

No attempt was made to analyze the extent of resulting paralysis in any of these cases. There were several hundred physicians who treated these cases, and reports were usually sent in within a few weeks of administration of the serum, so that no definite estimate of the extent of permanent residual paralysis was possible.

No attempt was made to trace the source of infection or mode of transmission, except to establish, where possible, contact with known or suspected cases of poliomyelitis. The only information requested on the data sheet was the age and sex of the household contacts, and record of known exposure to a case of poliomyelitis outside of the household.

*Serum was distributed to all cases reported and undoubtedly used in the vast majority though no report of its use has been returned to date in 132 cases.

DIAGRAM V

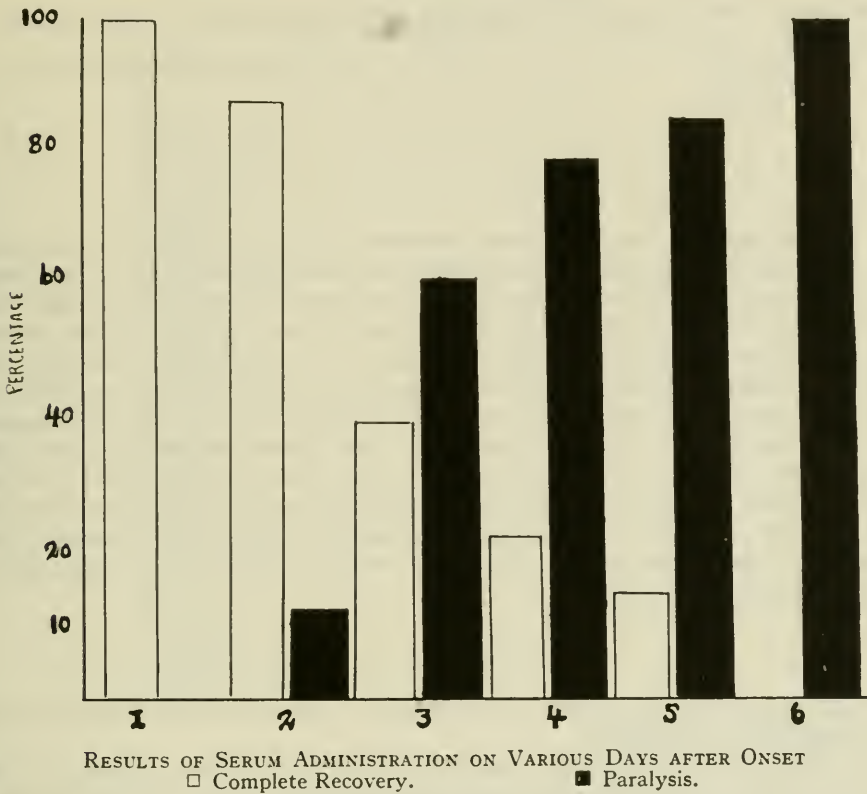


TABLE VIII

RESULTS IN 39 CASES WHICH DID NOT RECEIVE SERUM

Day of Illness Seen	Number of Cases	Number Showing Paralysis	Number Not Showing, Then or Later, Any Paralysis
First Day.....	6	3	3
Second Day.....	9	8	1
Third Day.....	15	15	0
Fourth Day.....	7	7	0
Fifth Day.....	1	1	0
Sixth Day.....	1	1	0
Total.....	39	35	4

SECONDARY CASES

There were twenty-six secondary cases reported. The period of incubation in over seventy per cent. of the cases was within 5-10 days after exposure as shown in Table IX.

TABLE IX

SECONDARY CASES POLIOMYELITIS OCCURRING AT VARIOUS INTERVALS AFTER PRIMARY CASES

Interval by Days	5	6	7	8	9	10	11	12	13	14	21
Cases—Total 26	3	4	4	2	3	5	2	1	0	1	1

Twenty-four of the twenty-six secondary cases occurred in rural areas. The secondary attack rate like the primary rate was highest in the 5-9 age group. In many instances children under three years were exposed to a primary case, and in some instances, even to a secondary case without contracting the disease, while older age groups contracted the disease. It could be quite possible that these exposed children had abortive unrecognized attacks. Other cases developed in families where mild attacks of "colds" were noticed prior to the development of the primary case. In some instances a low grade temperature had been observed previous to the recognized primary case. Cases also occurred in isolated districts where no history of previous illness had occurred, where the cases and other exposed persons (children) had not been off the farm all summer, and contact with the outside was possible only through adults, who gave no history of known exposure or illness.

SUMMARY

The lessons from the study of this epidemic and the control measures used would seem to be as follows:

1. The use of convalescent poliomyelitis serum in the treatment of the disease, especially in the pre-paralytic stage, would seem to be a rational measure attended with a high percentage of complete recovery.

2. Our experience is in agreement with that of the Manitoba group, namely, that the use of this serum by the intramuscular route gives results comparable with its use as reported previously by the intrathecal route, and lends itself to cases which are widely scattered where no hospital facilities are immediately available.

3. It is quite feasible with proper co-operation to secure and maintain a supply of serum sufficient for an epidemic of over 500 cases.

4. A supply of serum should be obtained and held in readiness months before the appearance of an epidemic. It is more difficult to obtain donors at this time before public interest is aroused through press articles on the occurrence of the disease in epidemic form, but this supply is essential for the treatment of the early cases.

5. It is quite feasible to supply a province the size of Ontario with serum readily available, if a sufficient number of distributing centres, strategically placed, are used for its distribution.

6. Poliomyelitis is not a disease of infancy, but most frequently occurs in children of school age.

7. The early diagnosis and early administration of the serum before paralysis is evident are essential for the best results from the use of the serum.

8. A sufficient number of secondary cases occur in households within 5-10 days after the primary case to warrant the incubation period and therefore quarantine being considered at least as long as ten days.

TUBERCULOSIS

(1) During 1929 the Travelling Diagnostic Clinic for Diseases of the Lungs visited the following centres:—

Kenora.....	69
Sioux Lookout.....	17
Nakina.....	38
Fort William.....	63
Port Arthur.....	73
Sturgeon Falls.....	24
Englehart.....	38
Sault Ste. Marie.....	70
Alexandria.....	54
Killarney.....	39
Stratford.....	91
Frankford.....	41
Haileybury.....	54
Ingersoll.....	44
Smiths Falls.....	54
Sarnia.....	39
Napanee.....	10
Arnprior.....	50
Oshawa (1st).....	76
Sudbury.....	73
Newmarket.....	15
Carleton Place.....	75
Prescott.....	40
Burwash.....	39
Fort Frances.....	28
Rainy River.....	22
Timmins.....	139
Oshawa (2nd).....	77
North Bay.....	97
	1,549

In addition to the above, the staff of the clinic co-operating with the Division of Industrial Hygiene, assisted in the examination of one hundred and sixteen (116) men engaged in industry.

Acknowledgment is tendered to the Division of Industrial Hygiene for their co-operation at various times during the year.

SUMMARY OF TRAVELLING CLINIC WORK FOR 1929

No. Cases Exam.	Tbc. not factor	Observation	Other conditions	Min. Tbc.	Mod. Adv.	Far Adv.	Active	Quiescent or Arrested
1,549	1,027 66.4%	155 10%	108 6.9%	129 8.3%	73 4.7%	57 3.6%	152 60%	107 40%
				259 or 16.7% of total cases			of Tbc.	of Tbc.

Observation was advised in 155 cases. In these cases the history and symptoms were such that a tuberculous infection as the cause could not be definitely ruled out on one examination and without a period of observation.

Those giving history of pleurisy with effusion, blood-stained sputum or hæmorrhage, without clinical and X-ray findings, are included in this classification.

In those grouped under "other conditions" were included:

Bronchiectasis.....	16
Lung Abscess.....	1
Effusion (these are also included under observation).....	3
Empyema.....	5
Asthma.....	29
Heart Abnormality.....	12

The remaining forty-two are made up for the most part by cases classified as having chronic infection of the lungs (mostly undiagnosed), cases of emphysema, diseased tonsils and enlarged thyroid, in which it was thought that any of the above conditions might be the cause of the symptoms or debility present.

CASES SHOWING TUBERCULOUS DISEASE—259

With History of Contact.....	87 or 33.61%
Without History of Contact.....	172 or 66.41%

Inherent dislike on the part of even some of the more intelligent individuals to an admission of familial tuberculosis or lack of appreciation of what is meant by contact undoubtedly influences to some extent these figures.

CASES GIVING HISTORY OF CONTACT—609

Tuberculous Disease found in.....	87 or 14.31%
No Evidence of Tuberculous Disease in.....	522 or 85.71%

By history of contact is meant—association in the same household or at work with a known case of tuberculosis.

Tuberculin reaction was positive in 211 cases, or forty-four per cent. out of 479 tested.

Tuberculin reaction in relation to contact,—

	Contact	No Contact
0- 4 years.....	24 or 80%	6 or 24%
5- 9 ".....	50 or 65.8%	26 or 34.2%
10-16 ".....	65 or 61.9%	40 or 39.1%

From the above it is seen that twenty-four out of thirty, or eighty per cent. of the children in contact during the first four years of life have become infected, and out of the twenty-four there were two cases or 8.5 per cent., which showed definite tuberculous disease.

TUBERCULIN NEGATIVE CASES IN RELATION TO CONTACT—268

	Contact	No Contact
0- 4 years.....	2	16
5- 9 ".....	50	58
10-16 ".....	67	75

This table when compared with the preceding one indicates that infection in early childhood goes along with intimate household contact.

AN ANALYSIS OF THE 259 TUBERCULOUS CASES IN RELATION TO HISTORY OF BLOOD SPUTUM AND HÆMORRHAGE

MINIMAL			MODERATELY ADVANCED			ADVANCED		
Without History of Blood	With History of Blood in Sputum	With History of Hæmorrhage	Without History of Blood	With History of Blood in Sputum	With History of Hæmorrhage	Without History of Blood	With History of Blood in Sputum	With History of Hæmorrhage
107 or 84.2%	11 or 10.3%	9 or 8.7%	56 or 74.6%	9 or 16%	10 or 18%	44 or 77.1%	6 or 13.6%	7 or 15.9%
(20 or 18.7%)		of total Moderately Advanced Cases	(19 or 34%)		of total Advanced Cases	(13 or 29.5%)		

Hæmorrhage.—Of the 14 cases referred to above all describe the amount of blood as two drams or over. Only 20 per cent. of all types of tuberculous cases gave history of blood in sputum or hæmorrhage. There were 47 cases that gave history of blood in sputum and 14 cases a history of hæmorrhage in which no lung or heart pathology could be demonstrated by physical or X-ray examinations. Three other cases giving a history of hæmorrhage showed evidence of a primary focus of infection. In the majority of these cases the date of hæmorrhage preceded our examination from eight months to a year and a half. In three cases hæmorrhage had taken place ten or more years previously.

TUBERCULOUS DISEASE IN CHILDHOOD—25

Age	Par-enchymatous disease	Media-stinal disease not tuber-culous	Min.	Mod. Adv.	Adv.	Act-ive	Qui-es-cent or Ar-rested	His-tory of Con-tact	No His-tory of Con-tact	Institu-tional Treat-ment	Home Treat-ment	I.C. *
1 1 5	5	1	5	.....	.....	4	2	6	.....	6	.....	6
5 1 9	2	2	2	.....	.....	3	1	4	.....	3	1	4
10 1 16	13	2	8	3	2	10	5	13	2	9	6	10
	20	5	15	3	2	17	8	23	2	18	7	20

The small percentage of diagnosis in the hilum gland group is interesting in view of reports from other sources. It should, however, be mentioned that in 63 cases further observation was advised because of suspicious signs and symptoms. In the cases of some of these the signs and symptoms might be accounted for by the presence of other foci of infection such as teeth, tonsils or inadequate rest and diet. It is possible that, making allowance for these facts, there would be a certain number of observation cases that would go into mediastinal tuberculosis group following observation. In 5 cases the intracutaneous tuberculin test not done.

In what might be described as eastern Ontario, including the counties of Prescott, Carleton, Dundas, Frontenac, Glengarry, Grenville, Lanark, Renfrew, Russell, Stormont and Leeds, there were 195 deaths from pulmonary tuberculosis, exclusive of those dying in sanatoria in 1928.

In the north-western portion of the province, including the Districts of Kenora, Thunder Bay, Rainy River and the cities of Port Arthur and Fort William, there were eighty-four deaths from pulmonary tuberculosis, exclusive of those dying in sanatoria, in 1928.

In the eastern portion of Northern Ontario, including the Districts of Cochrane, Algoma, Sudbury, Nipissing and the city of Sault Ste. Marie, there were ninety-seven deaths from pulmonary tuberculosis, exclusive of those dying in sanatoria, in 1928.

From tuberculosis surveys it has been found that there are at least three to five active cases to every death—depending on the locality. A very conservative estimate would bring the number of active cases of tuberculosis to 585 in the eastern counties, 252 cases in the north-western part of the province, and 291 cases in the north-eastern portion of the province, who are suffering from active tuberculosis and requiring sanatorium treatment. In none of these districts is there one bed available for the treatment of a case of pulmonary tuberculosis. These figures definitely reveal the immediate need of adequate institutional care for these people. An extension of the present sanatoria in southern Ontario would not meet this particular problem. Because of expense, dangers and difficulties of transportation, apart from humanitarian reasons, it has been found impossible to transport cases of active tuberculosis hundreds of miles from the above districts to southern sanatoria. In order that the best results may be obtained, it is absolutely essential that such institutions should be placed in the centre of the areas being served.

No substantial progress can be made in the solution of one of the greatest public health problems confronting the people of Ontario to-day until sanatoria are established in eastern Ontario, north-western Ontario and one to serve the district of the eastern portion of Northern Ontario.

(2) Maintenance of patients in sanatoria from unorganized territory, cost \$22,035.65.

II. VENEREAL DISEASE CONTROL

(1) *Distribution of V.D. Supplies:*

	Ampoules	Grams
Novarsan	4,978	3,130.2
Diarsenol	8,263	9,545.7
Bismuth Hydrate	15,121	39,186
Mercury Salicylate	13,345	17,834
Sodium Hydroxide	2,844	ozs.
Distilled Water	32,760	ozs.
Silver Nitrate	45,555	

(2) *Clinics:*

Number of clinics, 18.
 Situated at Toronto (6), Hamilton, Brantford, London, Windsor, Owen Sound, Ottawa, Fort William, Kitchener, St. Catharines, Kingston, Peterborough, Sault Ste. Marie.

1. Number of cases treated	7,615
2. Number of new cases treated	3,467
3. Number of treatments	111,614
4. Number of contacts and alleged sources of infection examined	1,534
5. Average number of patients under treatment per month	4,314
6. Number of visits made by nurses	5,601
1. Cases treated	7,615

	Male	Female	
Syphilis.....	2,252	1,696	
Gonorrhoea.....	2,212	1,058	
Double infection.....	155	242	
2. New cases.....			3,467
	Male	Female	
Syphilis.....	888	596	
Gonorrhoea.....	1,239	554	
Double infection.....	60	130	
New cases syphilis classified.....			1,241
	Male	Female	
Primary (252).....	172	80	
Secondary (411).....	222	189	
Tertiary (578).....	347	231	
New cases gonorrhoea classified.....			1,709
	Male	Female	
1.....	819	200	
2.....	172	104	
3.....	178	236	
New cases.....			3,467
Social histories taken.....			2,942
Cases referred by doctors, 696; friends, 401; self, 638; hospitals, 321; other clinics, 309; social agency, 208; Department of Health, 189; jails, 69; sources, 7; police, 27; contacts, 21; posters, 12; parents, 44.			
3. Number of treatments.....			111,614
	Male	Female	
Syphilis.....	29,242	23,474	
Gonorrhoea.....	45,187	13,711	
4. Number of contacts and sources examined.....			1,534
Positive for syphilis.....		373	
Positive for gonorrhoea.....		376	
Negative.....		785	
Children treated.....			517
Old.....		363	
New.....		154	
Treatments.....			5,446
	Male	Female	
Syphilis.....	1,625	1,734	
Gonorrhoea.....	327	1,760	
(3) <i>Number of Patients Treated in Hospitals where Clinics are Situated</i>			1,834
	Male	Female	
Syphilis.....	487	391	
Gonorrhoea.....	356	493	
Double infection.....	49	58	
Chancroid.....	1		
Number of days in hospital.....			27,475
	Male	Female	
Syphilis.....	7,549	5,892	
Gonorrhoea.....	4,870	9,164	
Chancroid.....	74		
Discharged from clinics.....			3,432
Apparently cured—			
Syphilis.....		390	
Gonorrhoea.....		1,075	
Transferred—			
Syphilis.....		417	
Gonorrhoea.....		336	
Lost.....		1,214	
(4) <i>V.D. Clinics in Penal Institutions:</i>			
Number of institutions.....			5
1. Number of cases treated in Institution.....			586
	Male	Female	
Syphilis.....	300	90	
Gonorrhoea.....	114	82	

2. Number of treatments given in institution.....			16,894
	Male	Female	
Syphilis.....	3,568	1,757	
Gonorrhoea.....	7,843	3,726	

COMPARATIVE TABLE

	Total Cases	New Cases	Treatments
1925.....	6,573	2,889	98,845
1926.....	8,395	2,824	85,682
1927.....	7,872	2,862	88,605
1928.....	6,820	3,464	102,360
1929.....	7,615	3,467	111,614

Social Service:

Outside places visited.....	75
Clinics visited (out of town).....	79
Lectures with films.....	67
Attendance.....	5,716
Lectures without films.....	3

CASES AND DEATHS FROM COMMUNICABLE DISEASES REPORTED BY LOCAL BOARD OF HEALTH

1929	Smallpox		Scarlet Fever		Diphtheria		Measles		Whooping Cough		Typhoid		Tuberculosis		Poliomylinitis		Cerebro Spinal Meningitis		Influenza		Acute Primary Pneumonia		Syphilis		Gonorrhoea		Chancrioid		Chickenpox		Encephalitis Lethargica		German Measles		Mumps		Septic Sore Throat	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths		
January	38	0	391	0	300	23	2,418	12	274	0	21	1	96	46	2	15	4	7,495	323	108	490	90	0	99	0	7	0	773	1	0	2	19	0	369	0	0	0	
February	133	0	465	5	273	7	3,521	6	368	2	87	3	114	56	0	2	10	5	509	100	37	228	131	3	164	0	0	563	0	4	0	26	0	548	0	1	0	
March	69	0	646	7	261	25	4,534	10	466	1	30	4	127	44	0	1	11	2	154	49	58	261	216	2	197	0	3	2	775	1	3	0	22	0	708	0	8	0
April	83	0	455	4	212	13	2,387	1	621	4	85	2	116	51	0	0	13	1	153	16	57	147	216	0	207	0	0	593	0	2	0	18	0	758	0	21	0	
May	86	0	378	1	129	9	1,889	1	432	1	35	1	72	50	0	0	10	2	26	3	20	132	145	0	156	0	0	576	0	0	33	0	526	0	6	0		
June	87	0	446	2	239	14	3,077	2	550	1	66	0	171	44	2	4	5	17	2	14	158	158	2	189	0	6	0	1,366	0	2	1	36	0	463	0	0	0	
July	57	0	164	0	184	11	954	3	347	0	23	2	116	35	1	0	3	8	3	6	91	208	0	262	0	0	547	0	0	7	0	137	0	19	0			
August	17	0	145	0	189	9	403	1	486	2	102	3	157	58	104	5	8	1	2	102	178	2	223	0	223	0	1	0	228	0	0	2	0	116	0	4	2	
September	19	0	193	1	338	23	177	0	461	5	98	11	121	54	227	9	6	1	3	2	4	104	114	0	260	0	0	196	0	2	2	0	112	0	1	0		
October	9	0	333	0	369	18	399	1	188	10	77	3	112	44	105	5	11	1	2	5	4	131	181	0	212	0	1	0	587	0	3	4	4	0	94	0	6	0
November	55	0	656	4	500	20	636	2	421	3	92	3	134	51	30	1	8	4	8	0	13	141	234	0	217	0	0	2,065	0	1	1	66	0	59	0	5	0	
December	55	0	585	7	267	13	384	0	283	2	22	0	71	30	6	1	4	2	6	9	16	148	159	0	141	0	0	1,550	0	1	0	73	0	113	0	2	0	
1929 Total	708	0	4,857	31	3,261	185	20,799	39	4,897	31	738	33	1,407	563	477	26	101	31	8,382	514	339	2,133	2,030	9	2,327	0	18	2	9,819	2	18	10	308	0	4,003	0	73	2
1927 Total	1,523	2	6,289	42	3,346	205	13,405	19	3,525	29	867	35	1,534	737	51	15	39	25	179	156	160	1,488	1,440	6	1,758	0	36	0	8,401	0	16	12	4,214	0	5,045	0	32	1
1928 Total	864	1	4,508	35	2,918	148	10,188	24	4,147	48	715	44	1,531	708	85	7	42	31	4,730	255	312	1,716	1,477	6	2,062	0	22	0	8,618	2	24	18	242	0	19,802	3	109	4

INDUSTRIAL HYGIENE DIVISION

J. GRANT CUNNINGHAM, B.A., M.B., D.P.H., Director

The toll exacted by industrial accidents and problems arising out of the cost of sickness are drawing attention more and more in the direction of what can be done to minimize the burdens of physical disability.

The government, in maintaining facilities for advising industry in the control of ill-health, is striking at the root of the matter. Industrial health problems are being referred to the Division to an increasing extent by employers and by employee groups. Both the Workmen's Compensation Board and the Factory Inspection Branch of the Labour Department are using the facilities available here for clinical and plant investigations. Many physicians, carrying responsibility for the health of workmen exposed to poisonous substances, are submitting specimens for clinical, laboratory or chemical analysis.

In the past year, there have been 330 examinations of workmen most of whom presented some occupational disease, mainly lead poisoning or silicosis. These are the two most important occupational diseases. A few cases of poisoning from chrome, benzol and arsenic have also been examined. Blood smears numbering 350 have been examined from workmen exposed to lead poisoning—service to physicians who have suspected cases of lead poisoning.

Ninety special chemical determinations have been made for evidence of exposure to poisons, the results used in the diagnosis of cases or the study of plant conditions—both with a view to minimizing existing hazards.

One hundred and sixteen examinations were made in co-operation with the Tuberculosis Division which has reciprocated in the Division's various silicosis enquiries.

An additional group of thirty-five experienced granite-cutters, thirty-three workers exposed to arsenic, sixty workers exposed to artificial abrasives and a few compositor apprentices have been given examination, and the results used to study the effects of substances used, and give protection to workmen.

These examinations have entailed numerous plant visits in addition to visits made for the examination of conditions of work where physical examinations were unnecessary.

The supervision of workers exposed to arsenic was continued from last year. Determinations of arsenic in excretions of workmen made possible by the establishment of facilities by the plant manager were continued until November. These determinations present some interesting considerations which are less valuable on account of the difficulties experienced in controlling the conditions in industry respecting the degree of exposure and the labour turnover among workmen employed.

Detailed examination and report has been made on the literature dealing with the toxicity, methods of collection and estimation, recommendations for control, and existing legislation regarding substances commonly used in spray painting.

During the year, chromium and its compounds as a source of poisoning has been added to the list of compensable diseases in the Workmen's Compensation Act.

Short statements have been prepared on lead poisoning and on chrome poisoning and requests for this literature have been frequent.

Addresses have been given before the Ontario Medical Association on "The Physician's Opportunity in Industry;" the Association of Government Officials in Industry on, "The Prevention of Occupational Diseases," and the Ontario Educational Association on, "Some Points of Interest in School Ventilation."

Masks.—The positive pressure mask described in last year's report and designed for the protection of workmen against fumes and dusts which are difficult to control by mechanical means, is now in use in forty plants. It has been further tested both in the laboratory and in the field and has been found to be quite satisfactory from the standpoint of protection, with few and only minor complaints from workmen. These complaints have largely arisen out of the use of more air than is necessary in the mask.

Ventilation.—The subject of ventilation has continued to occupy the attention of the division. Through the excellent co-operation given by the London School Board, it has been possible to obtain detailed records regarding temperature of classrooms with the teachers' sensations of comfort, heat, cold, dryness and odors.

In two schools, comparable in all respects except that at one the amount of air delivered to classrooms was reduced by one-half, observations have been made by the Division for all the important ventilation tests.

In addition records of the various types of illness causing absence from school among about 8,000 school children over a period of six months have been secured. The records obtained are now being dealt with statistically.

A similar investigation has been carried out in a modern office building. The situation is not very satisfactory regarding recommendations which should be made for the ventilation of large buildings such as schools and offices housing sedentary workers in large numbers.

The problem has to be faced by those responsible for the construction of each new building of this type. It emphasizes the need for more intensive work on both the physiological and engineering aspects of the question.

Sanitary Inspection.—The report of the Chief Sanitary Inspector attached, indicates that the supervision of sanitary conditions, particularly those associated with industrial activity in unorganized territory in the province, has progressed satisfactorily.

Medical contracts for the care of sick employees are constantly attracting physicians who are well trained to provide an increasingly improved medical service. The preventive aspect of their work is constantly assuming more importance.

The division has been unfortunate in losing the services to a wider field of Mr. A. R. White, former Chief Sanitary Inspector. The work is in capable hands with Mr. W. C. Millar's appointment as his successor. The tremendous development in the practice of preventive medicine in this field during Mr. White's long service has provided an excellent example of what can be accomplished when its merits are properly presented to industry.

The first serious setback, which the Division has had, came with the death of Miss R. M. Hutton, who had been with the Division since its inception. Miss Hutton was particularly well endowed and had basic training which resulted in contributions to the literary aspect of the work which it will be difficult to continue.

Among these accomplishments were guidance in the preparation of the industrial motion picture film, "Her Own Fault;" the development of an Industrial Hygiene Library, which continues to be extremely useful; a compilation of literature on lead poisoning up to 1923; and a popular publication entitled, "Health Confessions of Business Women," which enjoyed a distribution of 25,000 requested copies.

CHIEF SANITARY INSPECTOR
W. C. Millar

I have the honour to submit for your consideration the Thirteenth Annual Report showing work performed by the Sanitary Inspectors during the year 1929.

This is my first annual report as your Chief Sanitary Inspector, having succeeded Mr. Alex. R. White, who resigned to take over the very important position of Chief Sanitary Inspector for the Canadian National Railways. I wish to express the regrets of the District Sanitary Inspectors and myself at the great loss which we have suffered through Mr. White's severing his connection with the Department, but we feel proud to know that his sterling qualities as the foremost sanitarian of the Dominion have been recognized by such a huge corporation as the Canadian National Railways, in their appointing him their Chief Sanitary Inspector, with remuneration commensurate with the importance of the position.

Mr. A. L. Smith, who was District Sanitary Inspector for the eastern counties and unorganized territory of the extreme eastern part of the province, was transferred to the Fort William district. In recognition of the importance of this district and its immensity it has been divided in two, Mr. Smith taking the southern part and a new appointee, Mr. Alex. S. O'Hara, lately Sanitary Inspector for the Town of Kirkland Lake, the northern part, with headquarters at Sioux Lookout. In order that the necessary supervision over the eastern district might be continued, Mr. Richardson of North Bay has had his district extended east in order to take over the most important part of it.

In the past year no particular epidemic of any extent developed, with the exception of influenza which raged in the early part of the year. It was very noticeable during that period that companies operating well ventilated, comfortable camps were least affected by this influenza epidemic. The above conditions, in my opinion, were responsible for this. The fact of the above conditions existing made the employees more satisfied and willing to stay on the job, with the natural results that very few newcomers from the towns were required, thus lessening the danger of the disease being brought into the camps. In one or two of the camps where conditions were poor and our regulations not being complied with, with many men going and coming continuously, a big percentage of cases of influenza developed. This important benefit derived from the complying with the regulations is being recognized more fully each year by the more progressive woods operators.

Owing to the poor market for lumber there were fewer lumber camps operating in the past year, but this was made up for in the increase of pulpwood camps.

There were 107 lumber and pulpwood companies operating 440 camps, with a total of 21,000 employees; 143 mining camps, employing 7,047 men; 121 construction camps, employing 5,600 men; 9 fishing stations employing 770 men; 2 stone quarries, employing 250 men.

In addition to the above operations there were the usual extra gang camps operating over the thousands of miles of railroads under the supervision of this Division.

In all there were approximately 42,000 men employed in the above operations, each operation, of course, being under a contracting physician who, in almost every case, gave your inspectors their fullest co-operation, sending in 725 reports. The staff of inspectors made 722 inspections.

The District Inspector at Fort William and the District Inspector at Sault Ste. Marie had, in addition to their duties as sanitary inspectors, the carrying on of the clerical work for their respective District Health Officers in their absence in Toronto while studying for their D.P.H.

Each district inspector co-operated with the Ontario Pulp and Paper Makers' Safety Association in their efforts to prevent accidents in the pulp camps and paper mills, and also to endeavour to lessen the severity of the results of the accidents by inaugurating a system of first aid amongst the clerks in each of the camps. Your inspectors also attended meetings of the above association at Fort William and Kirkland Lake, and I personally spoke at both of them, giving an outline of our work in co-operating with their association.

In the past few years summer resorts in northern and western Ontario have, each year, had an increase of tourists from the United States. Special attention has been given by this division to the summer resorts which these visitors and our Canadian citizens patronize. This work has been appreciated by the companies and individuals operating these summer resorts, and, in my opinion, is one of our most important summer duties.

In addition to the above duties the inspectors have endeavoured to co-operate with the district health officers in the organized territory and have given assistance in sanitary matters when called upon by these officers.

Sporadic cases of smallpox and typhoid fever were reported from the Port Arthur, Sudbury, Kirkland Lake and North Bay districts, there being only one fatal case, this being one of typhoid fever contracted by an employee of one of the lumber camps in the North Bay district while he was in Callander on a Christmas visit.

COMMUNICABLE DISEASES

Our Records Show 147 Cases and 1 Death.

	Cases	Deaths
Typhoid fever.....	5	1
Smallpox.....	15	
Scarlet fever.....	1	
Diphtheria.....	6	
Mumps.....	3	
Chickenpox.....	1	
Influenza.....	115	
Measles.....	1	

All of these communicable diseases which developed were sporadic; and undoubtedly our system of immediately getting to the point in the unorganized territory where the communicable disease occurred and taking the necessary steps to prevent its spread, was responsible for the prevention of its becoming epidemic.

On only two occasions in the past year have the services of the law been called in for the enforcing of the regulations. In both cases the offender was a repeater with whom the same measures had to be taken several times in the

past ten years. Very favourable comments have been passed by labouring men all over the province on the improved living conditions which now prevail in the lumber and mining camps owing to the enforcing of your regulations covering those operations in unorganized territory.

In closing, I wish, on behalf of this Branch of the Division, to thank all the other officers of the Department who in the past year have given it their co-operation and advice when required.

DIVISION OF CHILD HYGIENE
JOHN T. PHAIR, M.B., D.P.H., Director

Public interest in a high maternal death rate continues more or less unabated. Suggestions as to how it may be lessened, emanate from most unexpected quarters. The proponents of prenatal care as a panacea for all the ills of child-bearing, are unceasing in their demand that such facilities be made available for every expectant mother in Ontario; while those who stress the value of more extensive hospitalization as the solution of the problem, are equally insistent that hospital accommodation for maternity cases should be increased. Better obstetrical training is called for by others, while some insist that the more wide-spread extension of public health nursing throughout the province generally, is essential to the success of any measures established for the lessening of the maternal death rate. All of these factors are of importance, and there is a growing body of considered opinion in favour of a well-rounded programme; but, sometimes, one or more of these facets of the completed whole, are so assiduously polished by their devotees, that they become dazzled with the results of their own burnishing, and their sense of perspective is temporarily lost.

Granted a fully enlightened womanhood, and all physicians skilled and painstaking, and the problem becomes relatively easy of solution. The Department is attempting to assume its responsibility in bringing about the first of these desired ends, by all of the means at its disposal, and awaits, with hope, the early development of the second.

The question of interesting the parent in the health of the pre-school age child, has been receiving some of the consideration that its importance warrants. The municipalities operating child health clinics, have been encouraged to make provision for the supervision of the health of this age group, in the clinic. Certain cities have, during the last year, made arrangements for the physical examination of these children prior to their becoming of school age. The success of the plan, as carried out in the City of Kitchener, would seem to justify its extension to other centres in the province.

The supervision of the school health service throughout the province, is still one of the major responsibilities of the Division. During the year just concluded, \$15,456 was awarded in grants to municipalities operating a type of school health supervision which meets the requirements stipulated by the Department of Education, while thirty-five municipalities received the subsidy given by the Department of Health; the total of which was \$15,475.00.

During the year, three urban municipalities, and one suburban township took advantage of the legislation which permits of the transfer of school health supervision from the local educational authorities to the health department.

The question of how this service could be extended to the schools of rural and small urban communities, has occupied the serious consideration of all those associated with the Division. The demonstrations carried out in various well-chosen sections of the province, initiated in 1928, have been continued in 1929. Our hope that we would prove the practicability of a well-rounded out, full-time, public health nursing service, including school health work, to those municipalities receiving the demonstrations, was unfounded. While some interest was aroused among a group of people in each of the communities served, the unreasoning opposition of the majority, to any such programme, more than offset

the evident interest. This opposition is apparently primarily founded on a pronounced disinclination to spend even the minimum of money upon anything as intangible as health. Immediate, concrete evidence of value to be received, is demanded. The possible relationship between present physical defects, undesirable health practises and future sickness, and all its associated ills, is not, apparently, of present interest to a sufficiently large group of the ratepayers in the rural and small urban municipality, to warrant their establishing a satisfactory community health service. The only apparent solution of the problem is to make school health supervision mandatory throughout the province, if in the estimation of those charged with legislative enactment, this type of health service is desirable.

The work done in the more sparsely settled portions of the province, by the field staff of the Division, has, from time to time, brought evidence of appreciation from those so served. Six nurses have been employed in defined districts in Northern Ontario during the entire year, while other members of the nursing staff have spent varying amounts of time in this area. These nurses, by enlisting the sympathy of local or provincial organizations interested in public welfare, have been of material assistance in making possible the immunization against diphtheria of large groups of children in the outlying districts; in bringing about the correction, on a large scale, of such physical defects as below normal vision, etc. They have been unremitting in their efforts to bring to those people resident on the geographical fringe of the province, the knowledge of the best health practices as they apply to themselves and their children.

The following figures demonstrate some of the activities of the field staff of the Division:

Number of homes visited.....	7,676
Number of school visits.....	1,725
Number of children examined in school.....	10,817
Number of exclusions for communicable disease.....	1,394
Number of children found with defects other than teeth...	6,036
Number of infants seen in home.....	1,617
Number of pre-school age children seen in home.....	4,178

The staff addressed 114 meetings of groups interested in child health.

DIVISION OF SANITARY ENGINEERING

A. E. BERRY, M.A.Sc., C.E., Ph.D., Director

I have the honour to submit herewith a resume of the activities in sanitary engineering during the year 1929.

The year has witnessed extensive activities in the fields of water works and sewerage. New systems have been installed, extensions made to existing works and many new projects initiated or advanced a step towards completion. As in the preceding year much interest has been shown in the smaller centres towards the construction of municipal works designed towards greater comfort and help in the homes of these municipalities.

OPERATION OF WATER WORKS AND SEWERAGE PLANTS

The inspection of water treatment plants and sewage disposal systems has continued to be a very necessary and essential part of the work of this Division. As in recent years engineers of the Division made periodic inspections of all water treatment plants in operation in the province. Over eighty per cent. of the water now in use in the various systems distributed for domestic purposes is chlorinated, and thirty-five per cent. is filtered. There are in operation 152 chlorination plants safeguarding this water. These various systems deliver approximately 350,000,000 gallons of water per day. With the very common use of this product and the fact that it offers a ready means for disease-transmission it is essential that continuous vigilance be maintained over all these supplies. Even though the typhoid fever death rate has dropped to a low point, the occasional outbreak of this disease clearly indicates that there can be no diminution in the control measures which have proven their efficiency wherever they have been properly administered. The Department has endeavoured to have all the chlorination plants and filtration works operated to the maximum efficiency, and has assisted the local officials as far as possible in this work. The engineers of the Division have been at the call of the various municipalities whenever desired. They have supplied orthotolidin free of charge to those places where chlorine is being administered. They have at all times urged the operators to keep definite records, and to make frequent tests to ensure that the water is always of satisfactory quality. Duplicate installations of chlorine equipment at these various plants is not general. This is an undesirable condition. It is almost impossible to maintain a single chlorination plant in continuous operation; consequently when it is necessary to clean the machine, or to put it out of service for any reason the water cannot be chlorinated. It is most imperative that every operator should be provided with equipment which will enable him to turn out a safe product, and he should also fully realize that wherever chlorination is deemed necessary it is most essential that every drop of water leaving that plant be adequately treated. Fortunately most of the operators are coming to realize that the operation of these plants is an important duty, and that carelessness and inefficiency has no place in this part of the work.

In view of the fact that there is no school for training such operators, nor is there any licensing system, the municipality should use extreme care in the selection of their plant operators. Wherever new men have been engaged for this work, the Department has endeavoured to instruct them in the proper procedure, and to ensure that the equipment is operated to the best advantage.

WATER CHLORINATION INSTALLATIONS

New chlorination plants were installed during the past year at Woodstock, Guelph, Southampton, Essex, Campbellford, St. Thomas and Elgin House (Muskoka).

At Woodstock the supply has been under observation for a number of years, and although pollution appeared in the samples no waterborne disease had been attributed to the supply. The Water Commission, however, on the advice of the Department felt it was desirable to eliminate any possible chance of an outbreak, and installed adequate chlorination equipment.

At Guelph the supply had been intermittently treated, but as one would expect, it proved very difficult to determine just when it was desirable to add the chlorine, consequently, a new machine was purchased, and the supply is now being treated regularly.

At Southampton a chlorination installation was recommended some two years ago, but the municipality failed to take the advice of the department. Early in the year some typhoid was discovered in Southampton, and a mandatory order was issued to the municipality, requiring the immediate installation of a chlorine plant.

TYPHOID FEVER

During the year two typhoid outbreaks appeared, and were attributed to municipal water supplies. The first at Essex appeared in February, and after an exhaustive search for the cause it was discovered that the reservoir under the pump-house had apparently been contaminated by sewage from a storm sewer along the nearby street. It would appear that during a heavy rainfall some two weeks previous to the outbreak, the sewer had become blocked and had backed up through a connection installed to take off roof water from the pumping station. This connection was made with open-jointed tiles, and terminated just outside the wall of the building. During the rainstorm it would seem that the flooding forced sewage back through this pipe where it found its way along the wall about ten to fifteen feet, until a small opening was encountered in the water reservoir built under the pumping station. Here the contamination entered and spread throughout the entire distribution system. Forty cases in all were located, but no deaths resulted. The water had at one time been chlorinated, but in view of alterations which had been made at the pumping station, and also in view of the fact that the analyses from time to time gave satisfactory results, the municipality ceased chlorination. Following the first case, the Medical Officer of Health immediately ordered the resumption of chlorination. This was a wise precaution, even though the infection had no doubt passed and was not likely to occur again unless some similar condition was met. This epidemic indicates the necessity for constant supervision of underground breaks in reservoirs. Where there is any contamination in the vicinity there is always a strong possibility that the walls of the reservoir may not be entirely tight, and may permit the entrance of this polluting material.

The other epidemic at Southampton was fortunately not an extensive one; only four cases were discovered. In these the only apparent common source of infection was the municipal water supply. Here again chlorination was established, and no further cases have been recorded since that date.

SANITARY SURVEYS

During the year sanitary surveys were made in the following municipalities: Alfred, Bloomfield, Bourget, Colborne, Hammond, Wasaga Beach, Wellington and Winchester.

The total number of municipalities now surveyed has reached 235. These surveys and reports continue to be of excellent value, both to the municipalities and to the Department.

RECREATIONAL SANITATION

Recreational sanitation in the province is continuing to increase in importance. The number of tourist camps and refreshment booths are increasing yearly and most of these appear to be well patronized. In addition to this there is the question of overnight stopping places in private homes; these facilities are increasing very rapidly. Fresh air camps, summer resorts and similar places are claiming the attention of the tourist and holiday-seeker. There is in all of these a problem of major importance as far as sanitation is concerned. The Department has continued its policy during the past year of inspecting these places, and although there has been no system of licensing, there does appear to be some improvement in the general sanitary arrangements. The number of tourist camps inspected last year totalled 529. Eighty-six of these were approved by the Department, representing 14.3 per cent. of the total. During the previous year the number was 460, and twenty per cent. of these were approved. Approvals were issued last year to 160 refreshment booths out of 1,236 examined. The banners issued by this Department to those which have been approved have played a part in securing business for the owners, and in directing the public to places where conditions are safe and satisfactory from a public health point of view.

MILK CONTROL

In the field of milk control the division's activities have been centered on offering advice to the various municipalities and to dairymen sufficiently interested to seek the advice of the Department. In view of the fact that the Milk and Cream Act does not call for provincial supervision, efforts can only be directed to advice and educational propaganda. There is no doubt from the survey of the pasteurizing plants that there is a great need for changes at these places to ensure that milk which is labelled as "pasteurized" shall be all that the label implies. Pasteurization is increasing in the various municipalities, and it is very important that these plants should turn out a product which will be of high quality and absolutely safe from a public health standpoint. There is also great need for education among milk producers and for adequate supervision of the production end. It is unfair to expect any pasteurizing plant to turn out a good product unless the raw milk supplied that plant is of reasonable quality.

WATER AND SEWERAGE CERTIFICATES ISSUED

Certificates for waterworks and sewerage installations and extensions issued during the year total 425, and represent a combined expenditure of \$8,961,080.81. These are listed in detail by municipalities.

WORK WITH THE DISTRICT OFFICERS

During the year there has been an increasing co-operation between this division and the district officers of health. While the staff has not been adequate to carry out all the work desired, the engineers have been made available to work in conjunction with the district officers as far as possible. In this way a great deal has been accomplished. This close co-operation by the district officers has been greatly appreciated by this division, and has made the work very pleasant.

The following article on water works and sewerage systems in Ontario reviews the changes which have taken place in the past year, as well as those proposed for the near future.

WATERWORKS AND SEWERAGE SYSTEMS OF ONTARIO

A review of the activities of the past year, in the field of water works indicates that noteworthy progress has taken place. Many extensive programmes have been initiated and others advanced a step or carried to completion. These municipal engineering works have claimed no small part in the total engineering accomplishments. The initiation of the various water works programmes has been influenced by several factors, chief of which included favourable prices, a keen demand on the part of the public for such utilities, together with the activities and recommendations of the Health Department. In addition to the construction programmes, numerous investigations and research studies have yielded data of value to designers and plant operators. Important new devices and methods for solving specific problems have appeared; conventions for discussions of problems associated with these subjects have taken place, and valuable contributions, with exchange of information, have appeared in the literature.

WATER WORKS OF ONTARIO

A condition has now been approached in this province in which public water supplies are available to practically every urban centre of modest size. Out of a total of 328 urban municipalities only 16 of those with a population in excess of 1,000 are without public water works. In these municipalities there is generally some particular reason for delay, such as excessive installation charges or difficulty of securing a sufficient and suitable supply of water. Installations are now quite common in places having populations of only a few hundred. Under average conditions there appears to be a tendency to undertake the installation of the system when the population has reached a point somewhere between 500 and 1,000. It is gratifying to find that these small communities are able to install and operate public water works systems without undue financial burdens. It is an indication that the costs are feasible and that there is a real appreciation of the value of such a system to the municipality.

In the Province of Ontario 308 water works systems are in operation and supply municipalities having a population of over 2,000,000. This is equivalent to over sixty-five per cent. of the total population of the province. These systems are nearly all publicly owned and operated. It is the exception rather than the rule to find a system of any size which is not owned by the municipal corporation. These systems distribute nearly 350 million gallons of water per day, the majority of which is unmeasured, and supplied at a very reasonable charge to the consumer.

During the past year, complete new water works systems were installed at Blind River, Capreol, Tweed and Wheatley. These are to serve comparatively

small populations, and all except Wheatley are deep well propositions. Wheatley takes its supply from the lake and filters and chlorinates. For the present year new systems are under consideration at Stirling, Nepean Township, Harrow, Lucknow, Bradford and Colborne, with others probably to follow as the year advances.

One of the most important features of any water works system is the source of supply. Ontario is fortunate in this respect, and fairly suitable supplies are available for most urban centres. The following table indicates the number of systems supplied from various sources:

	Wells	Springs	Lakes	Rivers, etc.
Total numbers.....	60	37	81	130
Per cent. of total.....	20	12	26	42

This clearly points to the fact that surface waters are still utilized as the predominating source of supply in the municipalities of the province, and treatment is consequently required for the greatest part of the water consumed.

DEEP WELL INSTALLATION

While surface supplies have been employed to the greatest extent in the past, there is being developed at present an increasing number of deep well installations. The inland location of many of the smaller municipalities with the drying up of streams or increasing difficulties of treating surface waters have rendered deep wells the only feasible source of supply. In the majority of cases these systems have worked to advantage, providing without treatment a water supply of good bacteriological quality, clear and cool. The systems are almost fool-proof, and can be installed and operated at moderate expenditures. Caution must, however, be observed against indiscriminate expenditures for sinking deep wells in areas where local conditions are unsuitable for either volume or flow or palatability and domestic purposes. A frequent objection to deep well supplies is that the water is often quite hard. In Ontario these waters vary from a moderate degree to extreme hardness.

NEW DEEP WELL SUPPLIES

In addition to the three new systems installed this year new deep well supplies have been developed or are underway at Kitchener, Ingersoll, Aylmer, Courtright, Harriston and Strathroy. New wells are also contemplated at Stirling, Colborne, Alexandria, Harrow, Dresden, Lucknow, Bradford, Exeter and others.

Changes in sources of supply are also expected next year at Stamford Township, Tilbury and Beamsville, with both the latter municipalities seeking lake supplies. The city of North Bay has last year undertaken a large programme involving a new location for the intake, new reservoir, pumping equipment and additional mains.

Important extensions of the distribution systems were made during the year at Toronto, Hamilton, Forest Hill, Etobicoke Township, Windsor, North York Township, Teck Township, Walkerville, Waterloo, York Township, Oshawa, Sandwich Township, and North Bay. The estimated expenditures for water works approvals issued by the Department of Health during the year approximate \$4,000,000. This included treatment works, supply works and distribution systems with the major share being spent on the latter.

PROTECTION OF THE QUALITY OF WATER

The safety of the public water supplies of Ontario is for the most part on a high plane and is assured by the necessary treatment works and close supervision. The annual typhoid fever death rates of the province have continued to decrease to the low point of the present time where public water supplies cannot be regarded as playing anything but a very minor part. Sporadic typhoid fever outbreaks unfortunately do occur, but these are few, and can generally be attributed to some unusual situation. Two of these occurred during last year, one of which was caused by circumstances which would be exceedingly difficult to foresee. Such an illustration clearly shows that in spite of the general safety of the supplies continuous supervision and vigilance is necessary. The engineers of the Department of Health have endeavoured to ensure that this protection is made as complete as possible. Periodic inspections of the supplies and treatment works have been made in co-operation with the local officials and methods worked out for the best operation of equipment.

An interesting court decision relating to water supplies was given during last year. In this an action for damages was brought against a municipality as the result of a water-borne typhoid fever outbreak. The plaintiff was awarded \$2,000 damages on the grounds that the municipality was responsible for the safety of the water delivered to the consumers and that reasonable precautions should be taken to prevent infection spreading through this agency. This should serve as a warning to municipal officials that even from a monetary standpoint it is bad business to take chances with the water supply.

WATER TREATMENT WORKS

In the field of water filtration no large plants have been completed in the province during the year. Small extensions have been made at Tecumseh and Arnprior, with the installation of new filter units and a dry-feed coagulation apparatus at the former; pressure filters have also been installed at Wheatley. There are now eighty-six municipalities served with filtered water from a total of sixty filter plants. Approximately thirty-five per cent. of the total water consumed from public supplies is now filtered.

FILTRATION PROPOSALS FOR 1930

A number of important filtration works are planned for the present year. Work will proceed on the new duplicate plant for the City of Toronto. Brantford has voted in favour of constructing a filtration plant at a cost in excess of half a million dollars. Plans are now being prepared by the consulting engineer with a view to starting work in the spring. This will replace their existing infiltration galleries. At Niagara Falls, the filtration plant which had been temporarily delayed, is now under construction. The City of Ottawa has turned from the usual procedure and built and operated an experimental filter plant treating Ottawa River water. The operation of the plant has furnished valuable data for the treatment of a highly-coloured and difficult water. The information secured will be utilized in the design of the new plant, plans for which are now under way. This plant is estimated to cost in excess of a million dollars, and work should proceed rapidly during the coming year. A modern filtration plant is also to be constructed at Belleville. Plans are now being prepared and work should be under way at an early date.

An extension to the filtration plant at Oshawa is also planned for the near future. A report has been presented by the engineer of the Essex Border municipalities to increase the capacity of their filter plant at an expenditure in excess of half a million dollars. It is expected work will be begun at an early date. At Hamilton great difficulties have been experienced with the water supply. Periodically, with the condition of the weather, the supply contains very large quantities of turbidity. This has not only been objectionable for domestic use, but it has placed an extremely heavy burden on those industries depending upon water for their processes. A filtration plant, costing in the neighbourhood of \$1,000,000, should be under construction here at a very early date. All these plants are major undertakings and it is doubtful if any previous year has witnessed progress on so many large works as are planned for 1930.

WATER CHLORINATION

The use of so many surface water supplies in Ontario has required the extensive use of chlorination as a sterilizing agent either with or without filtration. It is now the general practice where mechanical filtration is employed. Chlorination is applied to 191 supplies from a total of 152 installations, only eight of which are still using the bleach method. During the year, chlorination has been established for the first time at Woodstock, Petrolia and Southampton. A return to continuous treatment with chlorine has also been made at Guelph and Essex. Many changes and replacements of obsolete equipment have been made during the year. The amount of water chlorinated has now reached eighty per cent. of the total used for domestic purposes from public systems. Engineers of the Department of Health make periodic examinations of these installations and supply the operators with the necessary solutions for checking and maintaining the correct dosage. There appears to be some tendency in view of the ease with which the Ortho-tolidin test can be applied to dispense with regular bacteriological examinations. This is not good policy and both controls should be maintained.

PALATABILITY OF WATER

With safety of the supplies under control there is an increasing demand for water which is palatable and suitable for all domestic purposes. Warm or coloured waters are not favoured by consumers. Taste and turbidity are always objectionable for drinking purposes. A high mineral content is unsuitable for heating systems and washing. With the knowledge that these difficulties may in most cases be overcome, the public is demanding water treated to a finer degree. Water softening apparatus is gaining more favour where hard waters are encountered. The Department of Health has endeavoured to assist municipal officials in overcoming some of these non-palatability troubles. Assistance has recently been extended to Dundas, Smiths Falls, Lindsay, St. Thomas and others. The application of aeration, and specified introduction of chlorine has proven very useful for this work.

MUNICIPAL SEWERAGE

Much activity has been apparent in the field of sewerage construction during the past year. The widespread use of public water supplies has naturally created a demand for modern sanitary conveniences and municipal sewerage systems. This interest has been shown both in the small and large centres of population. In the former complete new systems are involved; in the latter treatment works

are required to overcome shore pollution and contamination of streams. Large expenditures are required to meet these demands, and the fact that such programmes are going forward is an indication of reasonable financial conditions prevailing in the municipalities. The outlook for the coming year in sewerage is likewise promising, and it is expected much work will be undertaken.

SEWERAGE EXPENDITURES

The estimated costs for sewerage works approved by the Department of Health during the year approximated \$7,000,000. This is slightly lower than for recent years, but in spite of this many important projects have been under way.

ONTARIO SEWERAGE SYSTEMS

In the Province of Ontario there are now ninety-five public sewerage systems supplying a population of 1,800,000. Some of these systems are comparatively small and have been built because extensive treatment works were not required, while others involve many miles of sewers with modern disposal works. Forty-six sewage disposal plants are now in operation, and six are under construction, and will be ready for operation shortly. The following table indicates the various types of plants in use in the province.

	Plain Sedimen- tation	Imhoff Tanks and Filters	Activated Sludge Systems	Total
Number of plants....	18	9	19	46
Per cent. of total....	39%	20%	41%	100%

SEWER EXTENSIONS

Large sewer extension programmes have been undertaken in the past year in many municipalities. The estimated expenditure of approximately seven millions has been concerned mainly with the following centres: Alliston (new system); Capreol (new system); East York Township; Etobicoke Township; Forest Hill; Hamilton; Kitchener, London, Mimico, New Toronto, North Bay, Oshawa, Port Colborne, Riverside, Sandwich, Sandwich West Township, Sarnia, Scarboro Township, Stratford (enlargement of plant), Swansea (new system), Teck Township, Toronto, Tweed (new system); Walkerville, Welland and York Township.

SEWAGE DISPOSAL

Satisfactory disposal of sewage has always been a serious problem for most municipalities. It is true that many have not as yet made any serious effort to meet their problem, and are discharging untreated wastes into the nearest body of water. This condition is one which began years ago when less was known about sewage treatment processes, and the most convenient method was adopted. So long as the municipality's own shores are not seriously menaced it is difficult to secure funds for construction of disposal works and their operation. The results from such expenditures are less apparent to the public than those for water treatment, and the difficulties of the problem are accordingly increased.

The location of so many of the larger cities on major bodies of water has naturally tended towards the minimum treatment of these wastes. As the municipality expands in population the initial costs for disposal works increase and greater hesitancy follows. So many of our municipalities are located on international waters where similar conditions exist on both sides that there is a distinct tendency to make no move until assurance is given that other offenders will follow the same course. The treatment of sewage from communities bordering on these waters is a problem of no small magnitude. As conditions become worse in certain of these areas, with complaints and investigations following, there is reason to believe that some minimum measure of treatment will be applied to all municipalities on both sides of the boundary. A committee representing a number of areas bordering on international waters has already been formed, and has agreed that when treatment is considered necessary the minimum shall be regarded as sedimentation. This example should have an excellent effect on inland centres where conditions are generally more acute by lack of sufficient dilution water. In all recent installations in Ontario the sewage has received some treatment irrespective of the nature of the diluent into which it is to be discharged. Where further treatment has been necessary the activated sludge system has been employed with success.

NEW SEWAGE TREATMENT WORKS

During the year work has been proceeding on a number of sewage disposal plants. At Orangeville a small activated sludge plant has been completed and put into service. At Port Colborne two plants of the same type are nearing completion. These works are interesting in that it was necessary to construct them somewhat close to residences, and that they are completely covered with glass in order to facilitate the control of odors and to overcome the natural objections of the public to the appearance of disposal works. The new activated sludge plant for North Toronto including sludge digestion tanks and glass-covered drying beds has been put into operation. This will replace the old works at Leaside, and will serve the Village of Forest Hill in addition to North Toronto. The Township of Scarborough, bordering the City of Toronto has completed and placed into service its new activated sludge plant to serve as part of the township. This plant contains a "Dorr" detritor and glass-covered sludge bed. A small activated sludge plant has also been put into service at Palmerston, and the existing sewers intended for storm sewage only have been converted for use as combined sewers. At Swansea, on the border of Toronto, a new activated sludge plant is being rapidly pushed to completion. This also will be fully enclosed in glass. A complete new sewerage system is nearly finished at Alliston. A small activated sludge plant is included in this and will be ready for service early in the spring. A new system is also under way for Tweed with a plain sedimentation tank for disposal purposes.

Additions to existing sewage treatment works are also being made at East York Township, Stratford, Mimico, Riverside, Woodstock, York Township, Kitchener and Waterloo. The additions at East York Township (2 plants), Woodstock and Mimico consist of glass-covered sludge drying beds. These plants are all activated sludge, except Mimico, where an Imhoff tank and sprinkling filters are used. At Stratford the plant has been increased in capacity by the addition of new aeration chambers, settling tanks with mechanical sludge removal, and air compressors. At York Township sludge disposal works are under construction. At Riverside certain mechanical equipment is being installed

to increase the capacity of the plant. At Kitchener additional aeration units have been erected at one plant, and at Waterloo new filter beds are being built. Plain settling tanks have also been built in Teck Township.

SEWAGE TREATMENT PROPOSALS

The coming year holds promise of much activity in the erection of works for sewage treatment. It is anticipated that several plants of both large and small capacities will be initiated or carried forward. Construction should start on the new plant to be built at Kitchener on the Grand River. The initial units of the disposal works for Hamilton should also proceed early in the year. An activated sludge plant is planned for Grimsby. At Windsor a report has been presented dealing with the question of sewage disposal for the area adjoining the Grand Marais drain. Oshawa is faced with the problem of undertaking a long delayed treatment programme. At Bridgeburg and Fort Erie the question of sewage disposal is closely associated with the water supply. A solution of this problem is expected at an early date. New sewerage systems with disposal works are also under consideration at Hespeler, Listowel and Essex. Both Newmarket and Sudbury require disposal plants. Additional treatment is required at North Bay and Elmira. In North York Township an engineer's report is being prepared on a comprehensive sewerage scheme. Etobicoke Township is planning to sewer a large area and to build a new disposal plant. A section of the Township of Nepean, adjoining the City of Ottawa, is being reported on for both water and sewerage.

SEWAGE CHLORINATION

Chlorination of sewage plant effluents has not been practised to a large extent in Ontario. It is used only in a few places where local conditions demand special treatment. At Kingsville it has been successful in protecting a bathing beach and maintaining sanitary conditions in a park. Some chlorine has been applied to the effluents of the disposal works of Mimico and Oakville. At the old North Toronto plant the effluent was chlorinated until the sewage was diverted to the new plant. Chlorine has also been successful at other points in alleviating severe stream pollution during the hot weather. From results obtained it would seem desirable to employ this at other similar points for short periods during the hot weather.

STREAM POLLUTION

Increasing interest is being shown towards the protection of the streams and lakes from serious pollution. The Department of Health has been making investigations of a number of situations throughout the province, and it is expected that further studies will be made during the coming year to determine the degree of pollution and the efficiency of different remedial measures.

In conclusion it may be pointed out that the Province of Ontario is well to the front in matters pertaining to waterworks and sewerage. Modern and effective works are in operation and where conditions call for improvements the programmes are not unduly delayed. New methods are being continually incorporated in the design of the various systems. The past year has been replete with much activity, and the new year promises to see the fulfillment of many of these works recently undertaken, together with the initiation of new and important programmes.

CERTIFICATES ISSUED RE SEWER EXTENSION FOR THE YEAR 1929

Municipality	No. of Certificates Issued	Extensions	Disposal	New
Alliston	1		\$23,250 00	\$90,766 50
Ancaster	1			8,274 10
Arnprior	1	1,059 60		
Belleville	4	13,786 33		
Brampton	1	28,233 94		
Brantford	1	9,940 00		
Bowmanville	2	13,042 00		
Bridgeburg	2	24,223 45		
Brockville	2	27,951 32		
Capreol	1			63,000 00
Carleton Place	2	28,267 00		
Drayton	1	974 00		
Dunnville	1	2,500 00		
Durham	2	21,385 50		
Eastview	2	3,178 50		
East Windsor	5	14,746 65		
East York	6	79,027 47	11,714 00	
Etobicoke Township	6	267,260 00		
Forest Hill Village	5	190,900 00		
Fort Erie	1	4,270 00		
Fort Frances	2	24,670 96		
Fort William	1	2,760 04		
Galt	1	1,503 01		
Gananoque	2	8,882 00		
Grimsby	2		35,310 00	75,000 00
Guelph	1	11,026 50		
Hamilton	13	781,399 00		
Hanover	3	47,675 67		
Kingsville	3	14,156 30		
Kingston	1	3,156 30		
Kitchener	3	17,501 13		
LaSalle	2	9,541 00		
Leamington	1	10,567 14		
Leaside	4	8,790 00		
London	9	57,439 14	10,000 00	
Midland	2	15,000 00		
Millbrook	1	660 98		
Mimico	4	36,525 00	14,800 00	
Mount Forest	1	4,000 00		
New Toronto	4	14,900 00		
New Liskeard	1	2,110 00		
Niagara Falls	2	5,363 44		
North Bay	3	41,069 76		
North York	1	2,625 00		
Orangeville	1		5,000 00	
Oshawa	5	148,946 00		
Ottawa	3	1,683 80		
Pembroke	1	981 00		
Petrolia	1	322 00		
Picton	1	6,242 50		
Port Colborne	7		200,000 00	310,500 00
Port Hope	1	12,565 05		
Preston	1	2,638 48		
Renfrew	2	460 64		
Riverside	3	92,465 00	40,500 00	
St. Catharines	1	16,122 50		
St. Thomas	2	8,362 13		
Sandwich	10	100,527 02		
Sandwich East	1	29,440 00		
Sandwich West	3	240,289 79		
Sarnia	1	70,000 00		
Sault Ste. Marie	1	5,986 33		
Scarborough Township	3	64,720 27		

CERTIFICATES ISSUED RE SEWER EXTENSION FOR THE YEAR 1929

—Continued

Municipality	No. of Certificates Issued	Extensions	Purification	New
Smiths' Falls.....	4	\$7,135 20		
Stamford Township.....	5	11,753 40		
Stratford.....	3	9,844 02	\$50,000 00	
Swansea.....	11	176,618 00	110,620 00	
Tisdale Township—	2	2,922 46		
South Porcupine..		\$1,742 95		
Schumacher.....		1,179 51		
Teck Township.....	8	127,303 51		
Toronto.....	41	783,573 00		
Tweed.....	2		12,000 00	\$15,100 00
Walkerville.....	5	39,285 51		
Woodstock.....	2	6,217 00	9,819 60	
Weston.....	1	4,976 00		
Welland.....	1	74,835 00		
York Township.....	12	880,508 07	110,000 00	
Totals.....	240	\$4,778,791 62	\$633,013 60	\$562,640 60

SUMMARY

	Applications	Estimated Cost
Re Waterworks:		
Extensions to existing system.....	156	\$2,561,469 99
Purification of water supplies.....	2	7,735 00
New systems.....	8	417,430 00
Total.....	166	\$2,986,634 99
Re Sewerage:		
Extensions to existing systems.....	240	\$4,778,791 62
Treatment works.....	13	633,013 60
New sewerage systems.....	6	562,640 60
Total.....	259	\$5,974,445 82

The total number of applications favourably reported upon re waterworks and sewerage for the year was 425, and involves an estimated expenditure of \$8,961,080.81.

CERTIFICATES ISSUED RE WATERMAIN EXTENSIONS, PURIFICATION, ETC. FOR THE YEAR 1929

Municipality	No. of Certificates Issued	Extensions	Purification	New
Arnprior.....	2	\$836 70		\$30,000 00
Bertie Township.....	4	21,078 10		
Bracebridge.....	1	10,000 00		
Campbellford.....	1	6,395 40		
Capreol.....	3			87,000 00
Carleton Place.....	1	5,583 40		
Colborne.....	1			77,035 00

CERTIFICATES ISSUED RE WATERMAIN EXTENSIONS, PURIFICATION, ETC.,
 FOR THE YEAR 1929—*Continued*

Municipality	No. of Certificates Issued	Extensions	Disposal	New
Crystal Beach	1	\$2,100 00		
East Windsor	5	40,244 69		
East York	3	24,790 16		
Essex Border Utilities Commission, Windsor	1	67,300 00		
Etobicoke Township	7	101,897 50		
Forest Hill	3	22,638 00		
Fort Erie	2	2,550 00		
Fort Frances	1	6,408 46		
Fort William	1	5,399 69		
Galt	1	17,926 21		
Grantham Township	1	20,000 00		
Guelph	1	1,045 00		
Hamilton	12	381,439 70		
Harrow	1			\$56,000 00
Kitchener	2	17,991 10		
LaSalle	2	15,228 86		
Leamington	1	31,600 40		
Leaside	3	7,650 00		
London	4	6,075 00		
Merritton	1	15,322 00		
Mimico	1	16,646 00		
North Bay	1	292,950 00		
North York	3	97,485 00		
New Toronto	3	1,735 83		
Niagara-on-the-Lake	1	6,500 00		
Oshawa	2	27,087 50		
Pembroke	2	8,718 92		
Peterborough	3	20,989 17		
Port Credit	2	7,493 95		
Rainy River	1	4,050 00		
St. Catharines	1	8,349 68		
St. Thomas			\$3,500 00	
Sandwich	7	35,837 53		
Sandwich East	2	50,129 14		
Sandwich West	1	136,583 74		
Scarborough Township	5	54,326 35		
Schreiber Township	1	35,000 00		
Stamford Township	7	17,529 64		
Stirling	1			70,415 00
Teck Township	8	117,825 36		
Tecumseh	3	8,136 11	4,235 00	
Tisdale Township	2	2,485 35		
Toronto	20	524,593 45		
Tweed	1			17,000 00
Waubashene	1			5,000 00
Walkerville	2	6,989 12		
Walkerville Water Co.	2	110,544 00		
Waterloo	1	40,000 00		
West Ferris Township	1	9,200 00		
Weston	1	1,411 00		
Waterdown	1	10,000 00		
Wheatley				74,980 00
Wiaraton	1	1,601 78		
York Township	7	75,771 00		
Totals	166	\$2,561,469 99	\$7,735 00	\$417,430 00

DIVISION OF VITAL STATISTICS

S. J. MANCHESTER, Director

The work of the Vital Statistics Division consists in keeping the records of the births, deaths and marriages which occur in the province.

The keeping of such records entails the issue of certificates of registration, principally of birth records.

Proof of registration is demanded by the Mothers' Allowances Commission, Old Age Pensions Commission, all departments of the Federal Government paying benefits to returned soldiers, athletic associations, associations carrying benefit funds, and by United States Immigration authorities on the part of those seeking entrance into the United States of America.

During the year over 43,700 certificates were issued, being an average of 3,642 per month. The number of searches far exceeds the number of certificates issued and is estimated at about 75,000 a year.

There were registered during the year 131,366 records of births, deaths and marriages.

The cash receipts for the year were \$70,509.40, which was an increase of \$4,868.73 over the preceding year.

DIVISION OF DENTAL SERVICES

F. J. CONBOY, D.D.S., Director

During the past few years, this division has been handicapped in its work because no grants were available for municipalities desirous of organizing public dental health services. At the last session of the legislature, \$5,000 was set aside to be distributed for this purpose. The Honourable Dr. Godfrey appointed a committee composed of representatives of the profession of dentistry and the Deputy Minister of Health to determine the basis upon which such grants should be given. This committee presented its report to the Honourable Dr. Godfrey, and it has been approved. The Department of Health is now in a position to provide some financial assistance to municipalities willing to organize school dental services. This provision should prove of great assistance in connection with the establishment of clinics for those children whose parents cannot pay dental fees.

An outstanding piece of work done during the year was the clinic at the Canadian National Exhibition. The department erected a suitable building, the equipment was supplied by the manufacturers and dealers, and the profession of dentistry arranged for the dentists and dental nurses. Eight hundred and fifty-one patients visited the clinic; they were of all ages and from various stations in life. It was the desire of the department to get reliable statistics in regard to the mouth conditions of a cross-section of the population, and we were able to accomplish our purpose. A committee of dentists is now at work examining the radiographs and case histories for the purpose of preparing a report on mouth conditions in Ontario.

A short series of lectures on dental hygiene was given in each normal school of the province. These lectures were started last year, and proved of such value that it was decided to make them a permanent part of the course for teachers in training.

The Director of Dental Services, accompanied by Mr. Jones, visited a large number of places in the province and gave a programme consisting of motion pictures and an illustrated talk to the school children. On such occasions, an address was usually given to the local service club and the dental society.

The Dental Division also arranged for local dentists to give mouth health talks to groups in their communities. An outline lecture and a chart or lantern slides were sent to the dentist and he presented the message to the society requesting it. In all, fifty-eight addresses of this kind were arranged. If the Director of Dental Services had taken this work himself, it would have taken an immense amount of time, and entailed travelling expenses.

The Department has now extended its educational work to the students in high schools and collegiate institutes. It seems foolish to carry on aggressive work in public schools and to lose many of the benefits of these efforts because no attention is given to the girls and boys after they graduate into the secondary schools. Some valuable contacts have been made during the year. The work of arranging for dental surveys of school children has been carried on through the year, and many children have had their mouths examined by the local dentists. This Division plans for these surveys, and provides gratuitously the "Parents' Notification of Defects Cards."

A very comprehensive survey was made at Orillia in connection with the Orillia Health Week, and a day was set aside for mouth health educational efforts. The Director of Dental Services gave a programme to the children and addressed several meetings of young people.

In conjunction with the Social Service Council of Ontario, a survey was made in the townships adjoining Collingwood and Stayner. The report of the dentist making the survey indicates that there is great need for an educational effort to bring to the attention of the people in the rural districts the need for providing adequate dental treatment for their children.

The regular educational work consisting of newspaper articles and radio talks was carried on during the year.

Each year the division receives an increased number of requests from people who desire advice in regard to their dental problems. We try as best as we can to meet these demands.

Considerable work was done in Northern Ontario during the year. Dr. S. C. Wilson, working under an arrangement whereby the Department remunerated him so he could provide treatment for those who could not pay fees, looked after the dental needs of the people at Whitney, Barry's Bay, Wilno, Flinton, Cloyne, North Brook, Kaladar, Madawaska, Wensley, Matawatchan, Denbigh, Palmer Rapids, Quadville, Rockingham, Rosenthal, Combermere, Princess Lake, Crow Lake. Two travelling clinics did work in other parts of Northern Ontario. Dr. Ross covered the sparsely settled areas near Thessalon, Sudbury, Cobalt, New Liskeard and Cochrane districts, and Dr. Layter was sent to Manitoulin Island. The following is a report of the work done by each:

Doctor Ross:

Number of patients examined.....	1,545
Number worked for.....	847
Number of silver fillings.....	554
Number of copper.....	605
Number of cement.....	130
Number of cement plus amalgam.....	21
Extractions.....	297
Treatments.....	80

Doctor Layter:

Patients worked for.....	136
Amalgam fillings.....	441
Copper amalgam.....	73
Synthetic.....	34
Cement.....	74
Extractions.....	273
Prophylaxis.....	103

DIVISION OF LABORATORIES

A. L. McNABB, B.V.Sc., Director

I have the honour to submit the following report and tabulated statements of the work of the Public Health Laboratories for the year 1929.

It will be noticed that during the past year the Division of Laboratories has examined 27,558 more specimens than for the year 1928. To this increase, the laboratories have contributed as follows: Central Laboratory, 16,789; Ottawa, 1,458; London, 6,268; Kingston, 2,150; North Bay, 981, and Peterborough, 840.

TABLE III.

From examination of this table, the following will be noted: The total number of diagnostic outfits prepared in the Central Laboratory was 106,155, which is an increase exceeding that of the previous year by 10,910. The work in this section has increased so that one new member has been added to the staff.

BACTERIOLOGY

During this year the Central Laboratory manufactured 80,090 cc's. of typhoid and paratyphoid vaccine, which is an increase of 12,630 cc's over last year and 100,220 cc's of pertussis vaccine, an increase of 20,020 cc's over 1928.

(a) Diphtheria:

As shown in Table I, 28,989 specimens were examined. Of this number, 12,443 were examined at the Central Laboratory. Virulence tests were done on all positive contacts and on all positive releases where the patient had been in quarantine for one month and also on all swabs from suspected carriers. Six hundred and seventy-eight virulence tests have been done during 1929.

(b) Tuberculosis:

Ten thousand two hundred and sixty-two specimens of sputum were examined this year which is an increase of 1,017 over 1928. The Central Laboratory showed an increase of 228 specimens. Five hundred and ninety guinea pig inoculations were made, and 453 of these were made at the Central Laboratory. The increase over last year was 275 for all the laboratories, and 223 of this number was the increase shown in the Central Laboratory.

(c) Typhoid:

Two thousand five hundred and forty-five specimens of dried blood were examined for typhoid, paratyphoid and *B. abortus* organisms. Of this number, 1,136 were examined at the Central Laboratory. The number of whole blood specimens has been increased during the past year, the laboratories having examined 1,432 which is an increase of 902 over the year 1928. The Central Laboratory contributed 611 of this increase. The whole blood examination is much more satisfactory than the dried blood examination. In each case the blood clot is cultured and the physician is sent a report of the culture. The work has increased in this section so that it has been necessary to add one new worker during the past year. The method followed in this examination is the same as that described in our annual report for the year 1928. During this year there were thirty-two positive blood cultures for *B. typhosus* and four positive blood cultures for paratyphoid *B.* Of this number there were three positive blood cultures for *B. typhosus* and one positive blood culture for paratyphoid *B.* in

specimens which gave a negative Widal reaction. This shows the value of our blood culture outfit in the diagnosis of typhoid.

During the year 1929, 211 feces and urine specimens were examined in the Central Laboratory. Of this number, 13 were found positive for *B. typhosus* and 8 positive for paratyphoid B. Six of the positive paratyphoid B. specimens were from the same patient so that actually during the past year there were three paratyphoid B. carriers detected. Thirty-five cases of undulant fever have been diagnosed in the Central Laboratory. The agglutination for typhoid and paratyphoid is supplemented by a set-up with *B. abortus* in all the branch laboratories.

(d) Gonorrhoea:

Fourteen thousand one hundred and four G.C. smears were examined and 5,690 of this number were examined at the Central Laboratory. There was a total increase of 1,986 in the number of G.C. smears examined during the year 1929.

(e) Rabies:

Sixty-five heads were examined for the presence of negri bodies during this past year. Six of this number were examined in the London branch laboratory, and two in the Kingston laboratory. The remaining fifty-seven were examined at the Central Laboratory. Thirteen, or 22.8 per cent., of the heads examined at the Toronto Laboratory were positive for rabies infection. One human brain was examined and found positive both by microscopic and animal inoculation. The routine followed in regard to rabies examinations is the microscopic examination using two different staining methods and the inoculation of 2 cc's of the brain emulsion of all specimens failing to show the presence of negri bodies microscopically, intramuscularly into rabbits into the masseter muscle. In cases where we obtain a positive diagnosis a telegram is sent at once to the sender of the head, and if the sender happens to be a layman the local medical officer of health is notified. The district officer of health and the epidemiologist of the department are both notified and also the district veterinary inspector for the Federal Department of Agriculture is advised so that he may take steps to prevent the spread of the disease in the district from which the specimen was received.

(f) Milk:

Eight thousand three hundred and forty-seven examinations of milk were made in the Division of Laboratories for the year 1929, which is an increase of 1,214 over last year. The central laboratory examined 1,965 of this number, which is an increase of 982 over last year. It is most encouraging to see an interest being taken in milk control.

(g) Water:

Nineteen thousand three hundred and ninety-nine specimens of water were examined during 1929, which is an increase of 2,084 over 1928.

(h) Miscellaneous:

Three thousand six hundred and forty-seven miscellaneous examinations were made during the past year, 1,217 of which were done in the Central Laboratory. These specimens include pus for organisms, swabs for culture, pleural fluids for organisms, microscopic examination of urine, pneumococcus typing on specimens of sputum, culturing of spinal fluids for meningitis and specimens of food or meat for pathogenic organisms.

Serology:

During the past year 90,972 Kahn precipitations tests and Wasserman reactions were done in the various laboratories. Of this number, 47,023 were

Wassermans, and 43,949 were Kahns. Each specimen for Wasserman received undergoes both the Kahn and the Kolmer test. The Kahn test is not done on spinal fluids, but a Wasserman reactions is done on the spinal fluids as well as a colloidal gold, colloidal mastic and globulin test. The branch laboratory at London performed 501 colloidal gold reactions, Ottawa 181, Fort William 19, and the Central Laboratory 836; making a total of 1,537 spinal fluids examined. There were seventy-one dark field examinations made for the early diagnosis of syphilis. Of this seventy-one, forty were made at the Fort William branch laboratory, and fifteen in the Kingston branch laboratory. During the past year we have not received one letter of complaint regarding our serological work.

Chemistry:

A summary of the increase in work in this section of the laboratory is shown as follows:

	1928	1929	Increase
1. Number of samples analyzed:			
Milk (butter fat, solids, preservatives, etc.).....	1,005	1,978	973
Blood sugar determinations.....	2,344	3,367	1,023
Liquor (a) for alcohol.....	1,213	1,481	268
(b) for medicinal ingredients.....	71	277	206
Chemical waters.....	74	95	21
2. Public Health products manufactured:			
Mercury salicylate (weight in grains).....	15,155	17,834	2,679
Bismuth hydrate (weight in grains).....	35,458	39,186	3,728
Silver nitrate ampoules.....	38,214	45,555	7,341
Distilled water (in ounces).....	30,050	32,760	2,710
Sodium hydroxide (in ounces).....	2,787	2,844	57

It will be noted during the past year that there was considerable increase in the work connected with the preparation of mercury, bismuth, distilled water and sodium hydroxide. This is accounted for by the free distribution of Novarsan which commenced during this year.

This section has also made a survey of the wine industry of Ontario during the past year which will be shown by the number of liquors examined and the increase over the previous year.

Branch Laboratories:

London branch laboratory examined 37,954 specimens, which was an increase of 6,268 over the year 1928. Of this number 1,689 outside water supplies were examined, and 503 outside milk supplies.

Ottawa branch laboratory examined 32,387 specimens, which is an increase of 1,458 over the year 1928.

Kingston branch laboratory examined 11,464 specimens, which is an increase of 2,150 over the year 1928. The work in this laboratory, as will be seen from the figures, shows a very substantial increase during the past year. During 1929 this laboratory detected several meningococcus carriers.

The work in the Fort William, Peterborough and Sault Ste. Marie branch laboratories has been very satisfactory during the past year.

The work in the North Bay branch laboratory shows an increase of 980 specimens over the previous year.

My associations with the directors of the various branch laboratories during the past year have been very pleasant and I have received co-operation in every possible way from them.

I also wish to thank you for the many kind considerations you have shown the laboratory during the past year as it has been of great stimulus to the work in the Division of Laboratories.

TABLE I

SPECIMENS EXAMINED BY THE LABORATORIES OF THE PROVINCIAL
DEPARTMENT OF HEALTH OF ONTARIO DURING
THE YEAR 1929

NUMBER OF EXAMINATIONS

Type of Specimen	Toronto	London	Ottawa	Kingston	Fort William	Peterboro	North Bay	Sault Ste. Marie	Total
<i>(a) BACTERIOLOGY</i>									
Diphtheria:									
Direct examinations.....	2,916	1,140	595	506	47	553	43	27	5,827
Cultures.....	12,443	5,178	6,633	1,849	378	1,246	621	641	28,989
Virulence tests.....	638	19	6	.....	.....	13	.....	2	678
Tuberculosis:									
Sputums.....	4,153	2,010	1,368	1,109	461	310	668	183	10,262
Guinea pigs injected.....	453	100	19	7	1	10	.....	.....	590
Typhoid:									
Micro agglutination.....	1,136	755	306	50	98	80	116	4	2,545
Macro agglutination.....	907	248	37	213	.....	16	1	10	1,432
Blood culture.....	808	65	2	43	12	2	1	2	935
Faeces and urine.....	211	229	10	16	4	19	.....	3	492
Gonorrhoea.....	5,690	1,920	2,666	959	893	833	619	524	14,104
Rabies:									
Heads examined.....	57	6	.....	2	.....	.....	.....	.....	65
Milk:									
Local municipal supply.....	.....	2,242	1,520	79	.....	348	205	345	4,739
Outside supplies.....	1,965	503	47	80	.....	197	623	193	3,608
Water:									
Local municipal supply.....	.....	366	2,675	381	11	477	241	2,190	6,341
Outside supplies.....	5,344	1,689	1,616	436	2,138	696	413	726	13,058
Miscellaneous.....	1,217	1,108	118	444	132	227	.....	401	3,647
Undulant fever.....	1,349	376	56	.....	.....	80	89	4	1,954
<i>(b) SEROLOGY</i>									
Syphilis:									
Dark field.....	2	1	7	15	40	4	.....	2	71
Wassermann test.....	28,191	9,334	5,833	2,579	1,086	.....	.....	.....	47,023
Kahn test.....	27,076	8,811	5,538	2,524	.....	.....	.....	.....	43,949
Colloidal gold test.....	836	501	181	.....	19	.....	.....	.....	1,537
<i>(c) CHEMISTRY</i>									
Blood sugars.....	3,367	341	98	172	47	65	.....	53	4,143
Milk:									
Local municipal supply.....	.....	407	1,532	.....	19	353	207	345	2,863
Outside supplies.....	1,978	517	83	.....	48	270	631	219	3,746
Water:									
Local municipal supply.....	.....	8	1	.....	.....	.....	.....	.....	9
Outside supplies.....	95	13	5	.....	.....	.....	.....	5	118
Coal samples:									
Calorific value.....	435	.....	.....	.....	.....	.....	.....	.....	435
Ash.....	435	.....	.....	.....	.....	.....	.....	.....	435
Moisture.....	488	.....	.....	.....	.....	.....	.....	.....	488
Volatile matter.....	42	.....	.....	.....	.....	.....	.....	.....	42
Liquors:									
Alcohol.....	1,481	.....	.....	.....	.....	.....	.....	.....	1,481
Medicinal ingredients.....	277	.....	.....	.....	.....	.....	.....	.....	277
Miscellaneous.....	286	67	1,435	.....	326	414	25	336	2,889
Total Examinations.....	104,276	37,954	32,387	11,464	5,760	6,213	4,503	6,215	208,772

TABLE II

TABLE SHOWING THE TOTAL SPECIMENS EXAMINED AT ALL LABORATORIES DURING THE YEARS 1911, 1926, 1927, 1928, 1929

Laboratory at	1911	1926	1927	1928	1929
Toronto.....	5,720	61,312	77,357	87,487	104,276
London.....		27,405	31,876	31,686	37,954
Ottawa.....		21,818	26,227	30,929	32,387
Kingston.....		7,353	9,078	9,314	11,464
Fort William.....		6,165	6,427	5,953	5,760
Peterborough.....		4,185	5,788	5,373	6,213
North Bay.....		3,674	4,212	3,522	4,503
Sault Ste. Marie.....		7,529	5,563	6,950	6,215
Total.....	5,720	139,441	166,528	181,214	208,772

TABLE III

TABLE SHOWING OUTFITS, VACCINES AND CHEMICAL PRODUCTS PREPARED AND DISTRIBUTED FROM THE MAIN LABORATORY DURING THE YEARS 1926, 1927, 1928, 1929

Outfits Sent Out	1926	1927	1928	1929
Bacterial—water.....	2,518	4,430	5,290	6,668
Diphtheria.....	9,691	14,204	17,440	21,926
Typhoid.....	2,551	3,723	4,015	4,053
Tuberculosis.....	6,230	8,688	9,879	11,165
Wassermann.....	31,770	32,368	41,721	41,916
Gonorrhoea.....	7,125	8,513	11,041	12,057
Blood sugar.....	2,090	3,823	4,414	6,454
Faeces.....	376	513	833	1,248
Miscellaneous.....		256	612	668
Total.....	62,351	76,518	95,245	106,155
VACCINES AND CHEMICAL PRODUCTS				
Typhoid monovalent vaccine, cc.....	21,700	32,450	23,710	30,620
Typhoid paratyphoid vaccine, cc.....	23,120	42,910	43,750	49,470
Whooping-cough vaccine, cc.....	65,370	71,120	80,200	100,220
Silver nitrate for prevention of ophthalmia, ampoules.....	29,135	35,314	38,214	45,555 amps.
Bismuth hydrate.....	22,858	22,922	35,458	39,186 gr.
Mercury salicylate.....	11,217	10,721	15,155	17,834 gr.
Sodium hydroxide in the treatment of V.D.S.....	2,414	2,492	2,787	2,844 ozs.
Distilled water in the treatment of V.D.S.....	20,677	21,812	30,050	32,760 ozs.

DIVISION OF NURSE REGISTRATION

A. M. MUNN, Reg. N., Director

In addition to office routine, and work in connection with two provincial examinations, affiliations were arranged for sixty-seven students from the provincial hospitals, and inspections were made to thirty hospitals in 1929.

We have, at the present time, one hundred hospitals conducting training schools for nurses. As a result of inspections and recommendations made, two training schools were discontinued in 1929, making a total of seven training schools discontinued since the organization of this department.

In spite of the fact that much improvement has been made throughout the province in regard to living conditions for nurses there is still much to be done. At the present time eleven hospitals of less than twenty-five bed capacity are conducting training schools. Of this number only two provide separate residence accommodation.

Indifference to standards is shown in these communities where nurses are housed in unattractive attic rooms providing little protection against fire and no provision for recreation or class-room space.

The training school in such a community has a right to exist if the Board of Trustees realizes that time and money must be spent for the teaching of nurses, and that attractive and healthy living conditions are part of the health programme. In all such situations it has been found that the superintendent is overworked and lacks a sufficiently large staff to do systematic teaching, while the nurses in training do a great deal of unsupervised work both day and night.

Since the nurse in training is frankly admitted to be an economic asset to the hospital, a business-like arrangement of value for value must be considered. If this does not include proper living and teaching conditions, as well as everything that will contribute to the preservation of health, it is then time for awakening in communities to a greater responsibility to those who make cheap nursing service possible.

STATEMENT OF REGISTRANTS AND REVENUE, 1929

Total number registered (since 1923)	12,690
Total number registered during 1929	1,121
Total number taking Provincial examinations, 1929	1,125
Registration fees for 1929	\$6,860 00
Re-registration fees for 1929	7,649 00
Total Revenue, 1929	20,757 65

DIVISION OF PUBLIC HEALTH EDUCATION

M. POWER, B.A., Director

During the year the former activities were continued, and in addition new work was attempted, the most important of which was the organization of a service whereby nurses engaged in health teaching throughout the province, were assisted through "loan exhibits" of health-teaching material. Fifty-six (56) exhibits were sent to forty-six (46) centres, in response to requests from nurses, teachers, women's organizations, Y.W.C.A. and Girl Guides. In addition to the above, large exhibits were displayed at the annual meeting of the Ontario Educational Association at the University of Toronto during Easter week, and the annual conference of the Health Officers, held at the Parliament Buildings, June 4th, 5th and 6th.

Health Literature Distributed

The demand for the publications of the department continues to be very heavy, and in response to requests, large quantities were distributed during the year. During 1929, several of the publications were issued as reprints, and a revised edition of "The Baby" was brought out.

Ontario Health Officers' Association

The Fifteenth Annual Meeting of the Ontario Health Officers was held in the Speaker's Reception Room, Parliament Buildings, June 4th, 5th and 6th. Great interest was shown in the sessions of the conference; the papers given were of a very high order and the discussions were varied and general. The medical officers attending totalled 371. A feature this year was the Symposium on Urban Health Administration on Tuesday morning, followed by a similar programme touching upon the problems of the rural areas on Tuesday morning. The Question Drawer was continued, and seemed to meet a popular demand. A special feature was an exhibit of health-teaching material. The executive for 1929 was composed of: President, Dr. W. E. George, District Officer of Health, North Bay; 1st vice-president, Dr. W. L. Hutton, Medical Officer of Health, Brantford; 2nd vice-president, Senator Gustave Iacasse, Medical Officer of Health, Tecumseh; secretary, Miss Mary Power, Director, Division of Public Health Education, Provincial Department of Health.

The programme is printed below:

TUESDAY, JUNE 4th

Morning Session

Daylight Saving Time

9.30 a.m.—Registration.

10.00 a.m.—Urban Health Administration Symposium.

"The Preparation of a Budget and its Satisfactory Apportionment for a City with a Full-time Health Department."—Dr. Fred Adams, M.O.H., Essex Border Municipalities.

Discussion: Dr. W. L. Hutton, M.O.H., Brantford; Dr. J. W. Fraser, M.O.H., Kitchener.

The question of annual increased expenditure: How this expenditure is to be made palatable not only to the appropriating body, but to the public, and how the sum which will be acceptable to the municipality is to be apportioned among the various departmental divisions, are questions of major importance to the health officer in any municipality.

“Pasteurization and the Correction of its Defects.”—Major J. H. Laurie, M.C., B.V.Sc., Deputy Director, Division of Food Control, Department of Public Health, Toronto.

Discussion: W. H. Forster, President, International Association of Milk Dealers; Dr. J. H. Radford, M.O.H., Galt.

Milk pasteurization, always an important subject to health officers, has received very close investigation in recent years. Certain defects in equipment and installation have been observed, and methods developed for correcting these. It is in the interest of every health officer to be familiar with this phase of milk control in order that all milk sold within his municipality, as pasteurized, shall be entirely safe.

“Food Inspection, Examination of Restaurants and Examination of Food Handlers.”—Dr. W. S. Downham, M.O.H., London.

Discussion: Dr. James Roberts, M.O.H., Hamilton.

The preparation of the public food supply has long been a matter of very real interest to the consumer, but only of recent years has it been a matter of sufficient apparent import to the municipality to permit of the expenditure of public funds for its efficient operation. With our added knowledge of the methods of spread of disease, this phase of public health has received the consideration its importance warrants.

TUESDAY, JUNE 4TH

Afternoon Session

2.30 p.m.—Address of Welcome—Honourable Forbes Godfrey, Minister of Health and Labour.

2.45 p.m.—President’s Address—Dr. W. E. George, D.O.H., North Bay.

3.15 p.m.—“Major Diseases of Adult Life as a Problem of Preventive Medicine.”—H. B. Anderson, M.D., M.R.C.S., L.R.C.P., Toronto.

WEDNESDAY, JUNE 5TH

Morning Session

9.30 a.m.—“Rural Sanitation.”—Dr. A. E. Berry, Director, Division of Sanitary Engineering, Ontario Department of Health.

Discussion opened by Dr. C. A. Campbell, M.O.H., Kirkton.

The rural health officer, in the course of his duties, is confronted with many perplexing problems in sanitation. He is continually asked for advice and rulings in matters pertaining to water

supply, sewerage, milk, school sanitation, nuisances, etc. A great deal of information concerning these has been made available and various procedures have been established.

10.30 a.m.—“Laboratory Specimens and Biological Products.”—Dr. A. J. Slack, Director, Institute of Public Health, London.

Discussion opened by Dr. A. L. McNabb, Director of Laboratories, Ontario Department of Health.

The assistance which the laboratories can offer to physicians in the diagnosis of disease depends to a large extent upon the method in which the specimens are submitted to the laboratory. The Department supplies free containers for the mailing of the various specimens, together with instructions for their proper preparation.

11.15 a.m.—“Some Problems of the Rural Medical Officer of Health.”—Senator Dr. Gustave Lacasse, M.O.H., Tecumseh.

WEDNESDAY, JUNE 5TH

Afternoon Session

2.00 p.m.—“The Department of Health and the Local Community.”—Dr. J. J. Fraser, D.O.H., Guelph.

Discussion opened by Dr. A. S. McCaig, M.O.H., Sault Ste. Marie.

The respective divisions of the Department of Health maintain a variety of services which are available upon request of the local medical officer of health in the furtherance of public health work in his municipality.

2.30 p.m.—“The Relative Frequency of Tuberculosis of Bovine Origin in Europe and America.”—James Miller, M.C., F.R.C.S. (Edin.), Director, Richardson Laboratories, Queen's University, Kingston, Ont.

Discussion: Dr. A. L. McKay, Epidemiologist, Department of Health, Ontario.

Raw milk as a source of infection for man has assumed a most important status in the diseases of animal origin. Bovine tuberculosis, and more recently the infection of undulant fever, are two problems which will be discussed, as well as some other infections of human origin which may be spread through milk.

THURSDAY, JUNE 6TH

Morning Session

9.30 a.m.—Question Drawer.

Morning devoted to discussion of questions relative to public health administration submitted by members of the association.

The resolutions committee submitted the following:

Moved by Dr. T. A. Lomer, Medical Officer of Health, Ottawa, seconded by Dr. James Roberts, Medical Officer of Health, Hamilton—

“Realizing the protection and promotion of public health has an importance to the community at least equal to that of public school education,

“Be it resolved, that the Ontario Health Officers’ Association here assembled, respectfully recommend to the Honourable the Minister of Health for the Province, that legislation be enacted empowering a local board of health to expend a definite mill rate on the assessment of the municipality, such legislation not to curtail the present powers of the local board of health in the event of emergencies or epidemics. Furthermore, be it resolved, that a committee be named by the president to wait on the Minister in regard to this proposed legislation and that a copy of this resolution be forwarded to the Prime Minister of Ontario and the Minister of Health.”

In compliance with the terms of the above resolution which was carried unanimously, the following committee was appointed:

Dr. James Roberts, Medical Officer of Health, Hamilton; Dr. T. W. G. McKay, Medical Officer of Health, Oshawa; Dr. Fred Adams, Medical Officer of Health, Essex Border; Dr. T. A. Lomer, Medical Officer of Health, Ottawa; Senator Dr. Gustave Lacasse, M.O.H., Tecumseh; Dr. A. E. Ranney, Medical Officer of Health, North Bay.

Moved by Dr. T. A. Lomer, M.O.H., Ottawa; Seconded by Dr. T. J. McNally, District Officer of Health, London:

“Be it resolved that the Ontario Health Officers’ Association go on record as being convinced of the seriousness and communicability of septic sore throat, and recommend that this disease be classed with the reportable and placardable communicable diseases.”

The nominating committee brought in their report which was accepted, resulting in the election of the following executive for 1930; President, Dr. W. L. Hutton, Brantford; 1st vice-president, Senator Dr. Gustave Lacasse, Tecumseh; 2nd vice-president, Dr. J. H. Radford, Galt; secretary, Miss Mary Power.

Health Exhibits

As in former years, the department received many requests from agricultural societies, women’s institutes, and various other organizations for exhibits in connection with fall fairs, etc.

Exhibits were set up in the following centres under the respective auspices:

Date	Place	Auspices	Attendance, Adults	Children
Nov. 15, 16	Belleville.....	Women's Institutes.....	800	.....
Dec. 12	Ayr.....	" "	200	.....
Jan. 16	Walkerton.....	" "	150	.....
" 23	Waterdown.....	" "	100	.....
Feb. 7	Stamford.....	" "	100	.....
" 12	Cheltenham.....	" "	50	200
April 1, 2, 3	Toronto.....	Ontario Educational Association.....	250	.....
May 4	Hamilton.....	Y.W.C.A.....	900	.....
" 24	Richmond Hill.....	Fair.....	2,500	.....
June 3-8	Hamilton.....	Produced-in-Canada Exhibition.....	6,000	.....
" 4, 5, 6	Toronto.....	Ontario Health Officers.....	500	.....
" 17	Windsor.....	Catholic Women's League.....	2,000	.....
Sept. 13	Toronto.....	King George School.....	100	400
" 13	".....	George Syme School.....	100	300
" 19	Lambeth.....	Fall Fair.....	600	.....
" 26	Elmvale.....	School Fair.....	400	600
Oct. 3	Sundridge.....	Fall Fair.....	300	500
" 8, 9	St. Marys.....	" "	600	.....
" 12	Meaford.....	School Fair.....	500	800
" 14	St. Marys.....	Catholic Women's League.....	.....	.....

In addition to the above, the department staged the Health Exhibit in the Ontario Government Building at the Canadian National Exhibition. A new venture was launched in the giving over of one section (80 feet) to the following voluntary health agencies, viz.:

- St. John Ambulance Association,
- Canadian Red Cross Society,
- Canadian Social Hygiene Council,
- Canadian Council on Child Welfare,
- Victorian Order of Nurses.

The experiment was considered worth-while, and the department felt that the effort was justified from the point of view of co-operation existing between it and the voluntary agencies.

In the department's own section, special emphasis was placed on nutrition.

The Division of Industrial Hygiene worked out a very interesting exhibition air movement.

The Division of Child Hygiene held clinics daily, and the dental clinic was a busy spot every afternoon and evening.

The Division of Sanitary Engineering stressed the safety of domestic water supplies, and the Division of Vital Statistics, by graphic presentation, showed the trend in mortality rates from the chief causes of death in Ontario.

Health Films:

The motion pictures have been very much in demand, and during the year were sent in response to requests to the following places:—

Date	Place	Auspices	Attendance, Adults	Children
Nov. 7	Humbercrest School	Dr. E. Guest		300
" 8	Stratford	Dental Division		1,300
" 30	Edith L. Groves School	Local Nurse		150
Dec. 3	Rockton	Dr. McClenahan	100	200
" 4	Courtland	Women's Institute	50	100
" 10	Welland	Dental Division	100	1,200
" 12	St. Thomas	" "		1,300
" 17	Bowmanville	" "		75
" 28	St. Catharines	Dr. G. Bates	150	
" 29	Windsor	Technical School		1,000
" 30	Riverside	Women's Home and School Club	100	600
Feb. 4	Peterborough	Dental Division		1,300
" 8	Stevensville	M. O. H.	50	250
" 15	Ridgeway	" "		600
" 19	"	Nurse		1,000
" 26	Burlington	Dental Division		1,100
Mar. 4	Collingwood	" "	100	
" 21	Silverbirch	Canadian Legion	300	100
April 11	Windsor	Dental Division		1,200
" 11	"	" "		1,000
" 11	"	" "		500
" 11	Ford	" "		500
" 12	Riverside	" "		1,000
" 12	Sandwich	" "		1,200
" 18	Caledonia	Dr. McClenahan		700
" 19	Port Colborne	Kiwanis Club		800
" 24	Belmont	Provincial Health Nurse	50	200
" 25	Springfield	" " "	75	150
" 26	Lyons Corners	" " "	75	25
" 29	Oshawa	Dental Division	50	1,200
May 7	Wm. Burgess School	" "	25	1,000
" 14	Chester School	" "		600
" 17	Dunnville	" "	50	700
June 14	Acton	Dr. McClenahan	100	250
" 21	Spencerville	Dr. Moloney	75	200
Aug. 12	Pine Crest Camp	Department of Health		150
" 19	Wallbridge	Dr. Sutton	60	
Sept. 13	Humewood School	Local Nurse	300	600
" 20	Elmvale	M.O.H.	400	600
Oct. 14	Orillia	Local Nurse		1,000
" 16	St. Marys	Catholic Women's League	300	

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN

NOVEMBER 1ST, 1928, TO OCTOBER 31ST, 1929

Month	Diphtheria Antitoxin							
	1-M and 5-M Units	Cost	10-M, 20-M and 40-M Units	Cost	Syringes	Cost	Schick Test	Cost
November.....	3,650-M	\$511 00	27,500-M	\$3,300 00	867	\$173 40	238	\$47 60
December.....	3,767-M	527 38	27,790-M	3,334 80	734	146 80	207	41 40
January.....	2,915-M	408 10	23,670-M	2,840 40	865	173 00	134	26 80
February.....	3,216-M	450 24	20,110-M	2,413 20	903	180 60	183	36 60
March.....	2,007-M	280 98	22,190-M	2,662 80	579	115 80	220	44 00
April.....	2,258-M	316 12	24,990-M	2,998 80	586	117 20	234	46 80
May.....	2,272-M	318 08	17,970-M	2,156 40	518	103 60	130	26 00
June.....	2,114-M	295 96	18,220-M	2,186 40	478	95 60	152	30 40
July.....	2,382-M	333 48	18,500-M	2,220 00	570	114 00	179	35 80
August.....	2,202-M	308 28	21,120-M	2,534 40	766	153 20	162	32 40
September.....	5,684-M	795 76	34,570-M	4,148 40	1,115	223 00	512	102 40
October.....	5,331-M	746 34	41,170-M	4,940 40	1,178	235 60	317	63 40
Totals.....	37,798-M	\$5,291 72	297,800-M	\$35,736 00	9,157	\$1,831 80	2,668	\$533 60

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—Continued

NOVEMBER 1ST, 1928, TO OCTOBER 31ST, 1928

Month	Diphtheria Toxoid				Tetanus Antitoxin							
	Individual Vial	Cost	6 Individual Vials	Cost	12 Individual Vials	Cost	Units	Cost	Syringes	Cost	Outfits	Cost
November.....	838	\$167 60	154	\$123 20	721	\$721 00	2,712,000	\$813 60	99	\$19 80	14	\$6 30
December.....	449	89 80	182	145 60	280	280 00	2,878,500	863 55	68	13 60	34	15 30
January.....	457	91 40	146	116 80	298	298 00	2,313,000	639 90	13	2 60	22	9 90
February.....	417	83 40	109	87 20	471	471 00	1,790,000	537 00	91	18 20	5	2 25
March.....	343	68 60	67	53 60	397	397 00	1,637,000	491 10	100	20 00	35	15 75
April.....	749	149 80	295	236 00	321	321 00	5,843,500	1,753 05	67	13 40	55	24 75
May.....	563	112 60	318	254 40	219	219 00	4,149,500	1,244 85	169	33 80	10	4 50
June.....	455	91 00	66	52 80	77	77 00	3,841,000	1,152 30	132	26 40	22	9 90
July.....	624	124 80	72	57 60	107	107 00	6,329,000	1,898 70	211	42 20	21	9 45
August.....	248	49 60	126	100 80	138	138 00	5,688,500	1,706 55	61	12 20	24	10 80
September.....	2,957	591 40	1,045	836 00	838	838 00	4,667,500	1,400 25	221	44 20	38	17 10
October.....	2,393	478 60	427	341 60	867	867 00	4,413,500	1,324, 05	212	42 40	38	17 10
Total.....	10,493	\$2,089 60	3,007	\$2,405 60	4,734	\$2,734 00	46,263,000	\$13,878 90	1,444	\$288 80	318	\$143 10

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—Continued

NOVEMBER 1ST, 1928, TO OCTOBER 31ST, 1929

Month	SCARLET FEVER ANTITOXIN			SCARLET FEVER TOXIN								
	2 cc. Vials	Cost	13 cc. Vials	Cost	Syringes	Cost	Dick Test	Cost	Individual Vials	Cost	For 6 Persons	Cost
November.....	1,202	\$480 80	657	\$1,478 25	14	\$2 80	333	\$66 60	318	\$95 40	150	\$150 00
December.....	692	276 80	654	1,471 50	.....	.....	268	53 60	334	100 20	263	263 00
January.....	817	326 80	696	1,566 00	4	80	228	45 60	237	71 10	70	70 00
February.....	780	312 00	686	1,543 50	10	2 00	221	44 20	256	76 80	97	97 00
March.....	902	360 80	868	1,953 00	6	1 20	337	67 40	296	88 80	141	141 00
April.....	1,036	414 40	816	1,836 00	13	2 60	279	55 80	396	118 80	283	283 00
May.....	801	320 40	733	1,649 25	8	1 60	298	59 60	287	86 10	140	140 00
June.....	468	187 20	566	1,273 50	.....	.....	297	59 40	247	74 10	39	39 00
July.....	347	138 80	427	960 75	.....	.....	235	47 00	208	62 40	49	49 00
August.....	297	118 80	370	832 50	.....	.....	101	20 20	86	25 80	120	120 00
September.....	493	197 20	449	1,110 25	.....	.....	285	57 00	181	54 30	51	51 00
October.....	1,005	402 00	877	1,973 25	24	4 80	419	83 80	385	115 50	287	287 00
Total.....	8,810	\$3,536 00	7,799	\$17,547 75	79	\$15 80	3,301	\$660 20	3,231	\$969 30	1,690	\$1,690 00

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—Continued

NOVEMBER 1ST, 1928, TO OCTOBER 31ST, 1929

Month	20 cc Meningitis	Cost	Intraspinal Outfits	Cost	Smallpox Points	Cost	Rabies	Cost	Anti- Anthrax	Cost	Insulin	Cost
November.....	90	\$106 00	16	\$7 20	17,114	\$770 13	10	\$109 00	..	.....	1,188,200	\$4,752 80
December.....	167	194 00	27	12 15	10,066	452 97	16	168 00	..	.....	1,162,200	4,648 80
January.....	449	501 00	52	23 40	10,302	463 59	1	10 50	..	.....	1,339,100	5,356 40
February.....	248	280 00	32	14 40	13,036	586 62	40	420 00	..	.....	1,191,900	4,767 60
March.....	223	279 00	56	25 20	9,246	416 07	11½	120 75	..	.....	1,036,500	4,146 00
April.....	177	215 00	38	17 10	17,255	776 47	21	220 50	..	.....	1,137,100	4,548 40
May.....	398	469 00	71	31 95	22,879	1,029 55	3	31 50	..	.....	1,205,000	4,820 00
June.....	253	293 00	40	18 00	14,056	632 52	24	252 00	..	.....	1,304,700	5,218 80
July.....	334	380 00	46	20 70	8,467	384 94	36	378 00	6	10 50	1,230,800	4,349 68
August.....	172	204 00	32	14 40	11,466	522 43	.....	.....	..	.....	1,104,000	3,894 00
September.....	234	265 00	31	13 95	14,332	658 92	5	52 50	.....	.....	1,456,400	5,119 44
October.....	146	186 00	40	18 00	9,734	450 39	23	241 50	.....	.....	1,171,200	4,105 56
Total.....	2,891	\$3,372 00	481	\$216 45	157,953	\$7,144 60	190½	\$2,004 25	6	10 50	14,527,100	\$55,727 48

SUMMARY

Biological products.....	\$104,108 97	Insulin.....	\$55,727 48
Syringe containers.....	\$2,140 40	Net Cost.....	\$157,696 05
	101,968 57		

DISTRICT OFFICERS OF HEALTH

DISTRICT No. 1

T. J. McNALLY, D.O.H.

I have the honour to submit herewith the 1929 Annual Report for this district which comprises the six south-westerly counties in the province of Ontario. These counties are subdivided into one hundred and twenty-one municipalities, each having a regularly constituted local board of health which is charged with the administration of the Public Health Act, Regulations and local by-laws under this Act.

Your district officer being responsible for the supervision of all matters pertaining to public health in the district, has, by frequent visits to these local boards and their officers, by reviewing their activities, discussing their problems and suggesting further activities to make for more effective administration, endeavoured to fulfil this duty.

In addition to these routine calls many special visits were made to deal with difficulties arising in regard to isolation, quarantine, nuisances, and control of epidemics.

The public health nursing demonstrations were arranged for, difficulties encountered by the nurses were discussed with them, and where possible, ironed out. Public meetings were addressed regarding this work with the object of developing an appreciation of its importance and necessity.

Local boards of health, councils and other organized associations were addressed on a variety of subjects pertaining to public health.

Several conferences were held with the Minister, Deputy Minister, and Divisional Directors regarding problems of administration arising in the district. The results of these conferences were very helpful in the discharge of my duties as in every case satisfactory co-operation and advice was furnished.

The annual inspection of all motor camps and highway booths involved considerable travel and time.

The year's work thus so briefly outlined entailed over twenty-two thousand miles of motor travel and could not possibly have been accomplished in any other way, and not even thus, had not the Highways Department provided so many miles of excellent roads.

Having given this general synopsis of the work, permit me to indicate it more particularly, though briefly, under the following heads:—

PUBLIC HEALTH NURSING

In six municipalities general Public Health Nursing service is being carried out under the Local Boards of Health as provided for under the Public Health Act.

Three cities have the dual service of School Nurses under the Board of Education and Public Health Nurses under the Local Board of Health, while in two cities the Board of Education employs a school nurse.

During the year Miss Pennock completed her demonstration in North Gosfield, gave a demonstration in Watford, where she examined 108 pupils, found 203 defects followed by 81 corrections. She visited 102 homes where she saw 184 individual cases.

Later in the year she commenced a demonstration in Plympton and Forest. In the former she examined 326 pupils, found 475 defects, and had 22 corrections made to date, paid 247 home visits on 355 individuals.

The demonstration is being continued in Forest and the corrections delayed in Plympton through inclement weather will be carried out later.

Mrs. Bagshaw, continuing her demonstration in Aylmer and South Dorchester, examined 911 pupils, finding 1,094 defects in the former public schools and 193 in the latter with 45 corrections. This work was done between January 1st and July 6th, 1929. She also conducted six home nursing classes with an average attendance of 18, organized three clinics which were conducted by Dr. Kitely, who also visited the schools and examined referred cases.

Mrs. Bagshaw organized three public meetings which were addressed by Dr. Doan, M.O.H. and your district officer.

As a result of this excellent demonstration, the South Dorchester council passed, unanimously, a resolution to join with Aylmer in securing the service of a full-time Public Health Nurse. For financial reasons Aylmer council has deferred action.

The latter part of the year has been spent by Mrs. Bagshaw giving a demonstration in North Dorchester and continuing the service in South Dorchester. The report on this service has not yet been compiled.

Very material assistance was given in these townships by the nurse in controlling outbreaks of mumps, scarlet fever, whooping cough, measles and diphtheria, as well as clearing up impetigo, scabies and pediculosis in the schools.

It is only fair that the excellent co-operation and assistance of Dr. Doan should receive credit in connection with this very satisfactory piece of work.

MILK

During this year some appreciable advance has been made in having pasteurizing plants brought up to a better standard of efficiency through inspection of the plants and instruction of the operators by the Division of Sanitary Engineering.

The public are gradually becoming educated to the necessity for this procedure so that the time appears opportune for legislation requiring that all milk for domestic use be so treated by plants inspected by properly trained engineers.

The menace to public health through bovine tuberculosis, undulant fever and septic sore throat directly from the cow as a source and through milk as a medium for the dissemination of diphtheria, scarlet fever, septic sore throat and typhoid fever is so well established that prevention by efficient pasteurization is imperative, especially since this is the only practicable procedure to protect the public against these dangers.

SCHOOLS

Perceptible advance is being made in the sanitary condition of these institutions through the combined efforts of the school inspectors and the local Medical Officers of Health, though much remains to be done, particularly in the way of improving toilets, making provision for the children to wash their hands and improved lighting.

COMMUNICABLE DISEASES

The failure to report promptly each case of communicable disease by the householder and the medical attendant is largely responsible for epidemics.

In too many instances the medical attendant waits for a laboratory confirmation of diagnosis before reporting, overlooking that he is required by the Act to report *suspected* cases.

DIPHTHERIA

The incidence of this disease appears to be on the decrease, but apparently the mortality percentage is rather increasing when taken on its incidence indicating greater virulence.

Where toxoid is being used in a reasonable percentage of the child population there is a decided decrease in the incidence of the disease as shown in Windsor, Woodstock and other places in this district.

Gradually, though all too slowly, protection by toxoid against this disease is being taken advantage of by the public. Would it be possible for the Department to assist in creating a more widespread interest among parents in protecting the pre-school children?

VENEREAL DISEASES

The free clinics for these diseases are being very well patronized, the one in Windsor is especially well spoken of. The neglect of medical men to report cases is most regrettable and makes it practically impossible for health authorities to offer any desirable measure of control over these diseases.

TYPHOID FEVER

During the year there have been at least 14 cases of this disease in the town of Tilbury, with two deaths resulting. Ten of these cases were definitely traced to well water with the two deaths already referred to.

The source of four cases were doubtful as those affected were moving about from place to place.

There have been 39 cases in the town of Essex due to pollution of their water supply by sewage being backed through an overflow pipe from the reservoir emptying into a sewer which became blocked.

As the presence of this connection was unknown to us, its location called for some really expert work by Dr. Berry.

The exclusion of milk as a medium for conveyance of the disease demanded careful and continued investigation by Dr. A. L. McKay and your district officer, owing to the fact that all the cases at first were on one milk route, and the analysis of the water supply at the time of the investigation showed it to be free from contamination.

The connection between the reservoir and the sewer having been located, and the evidence of sewage in the connection, and the fact of a very heavy rainfall and thaw at the time concurrent with incubation period of the outbreak, explained the source of the disease.

RABIES

The spread of this disease noted in my last report has continued until now five counties are involved and conditions are serious, as there is not any hope of control, so far as I can see, under existing legislation.

WATER SUPPLIES

In this connection with Tilbury, I desire to bring to the attention of the Department that while some activity was evidenced during the year by the town officials towards providing a safe water supply, nothing definite has been done so far as I am aware, up to the present. Therefore, I recommend that the Department issue an order for the installation of a water supply. My reasons for this recommendation are based on the results of the survey of the well water made by your engineers and the outbreak of typhoid during the year, as already noted.

It is satisfactory to note that Petrolia, Port Stanley, Aylmer and Woodstock are now guarding their water supplies by chlorination, and that Court-right is making an earnest effort to provide the citizens with a safe supply.

MOTOR CAMPS AND HIGHWAY BOOTHS

During the tourist season Mr. Johnston of the engineering staff and your district officer inspected all the tourist camps in the district (95) ninety-five and approved of (35) thirty-five as complying with your minimum regulations.

We also inspected all highway booths in the district (190) one hundred and ninety and approved of (69) sixty-nine as conforming to your minimum standard. In each case of approval the certificate issued by the Department was granted.

This shows a decided improvement of camps belonging to the better type of owners who are amenable to advice and instruction, but without licensing power, your officers find it difficult, if not impossible, to get favourable action from many of the other class.

During our inspection one hundred and sixty-six samples of water from camps' and booths' supplies were taken and examined at the Institute of Public Health, London.

These samples were classified after examination by the Laboratory as 39 good, 11 doubtful, 18 fair and 98 unsatisfactory, indicating that over one hundred supplies are potentially dangerous.

SMALLPOX

During the year a mild outbreak occurred in the township of Harwich and passed as chickenpox until finally a case came under the observation of Dr. Hanks, M.O.H., who found on investigation that there had been about 30 cases. Vaccination and quarantine prevented further spread of the disease.

I have endeavoured and, through the co-operation of local officers, succeeded in having a larger number of school children vaccinated in several of the municipalities.

The disease has made its appearance at several points in the district but the above is the only instance where any considerable number of cases occurred.

SEPTIC SORE THROAT

I have for several years past advocated isolation and quarantine for this disease, because of its incidence with an occasional death and its confusion with diphtheria and scarlet fever, but this year I have to record an outbreak originating from a case of erysipelas and apparently spread by contact as no other route was common to the patients as far as I could learn.

There are six known cases with three deaths. In another family there were two cases and one death but not connected in any way with the other

cases, either by contact or otherwise. Considerable time was devoted to this investigation to verify the facts as stated, because this disease is frequently spoken of as a milk-borne disease.

CEREBRO-SPINAL MENINGITIS

A confusing and interesting, though sad, outbreak of this disease occurred in Ekfrid township. The first case, a young man, died within a few hours after being taken ill, without a positive diagnosis being made or the case reported. The second case, a young boy in the same family, was taken ill and died in a few hours without any definite diagnosis. This case was reported to the health authorities who ordered a private funeral.

The confusion arose through the first victim having attended the funeral of a young lady who died of septic infection of a cut with a butcher knife, the complication here arising because she had a sister suffering from a discharging ear who was a nurse and attending to the wound.

A few days after the young lady's funeral her mother took acute tonsilitis (to which she was subject) and died of oedema of the glottis on her way to the hospital and at the same time a brother was taken to hospital suffering from erysipelas (to which he was subject). On investigation I was satisfied the cases in this family were probably streptococcal infection and coincidental.

The four deaths in two well known families within a few days naturally caused much concern locally as all were supposed to be from the same cause.

I arrived on the scene the day following the burial of the boy and concluded after a day's investigation and a careful consideration of the facts and circumstances that there was not any relationship between the illness in the first and second families, but could not come to any conclusion at that time as to the disease which caused the death of the young man or the boy. I then arranged for a post-mortem on the boy. The next day Dr. A. L. McKay, Epidemiologist, joined me in the investigation and, after going over the situation carefully, agreed with me that the deaths of the young man and the boy were not related to the conditions in the other home, nor could he arrive at any conclusion regarding the cause. The post-mortem was made that evening by Dr. Johns of the Institute of Public Health, and was practically negative except that a small dark spot was observed below the navel and this was not distinctive owing to post-mortem changes.

A few days later a young woman in this family was taken ill with symptoms similar to those of the young man and boy, so Dr. Johns and your district health officer saw her in consultation with her medical attendant and the local officer of health. From the symptoms cerebro-spinal meningitis was suspected, spinal fluid drawn off which on examination revealed the disease to be cerebro spinal meningitis. In spite of recognized intraspinal treatment the case terminated fatally.

In this investigation, Dr. Slack and Dr. Johns of the Public Health Institute here, Dr. Freele the medical attendant, and Dr. Dewar, M.O.H., gave Dr. McKay and your district officer every possible assistance.

The other communicable diseases were of mild type and their incidence rather below normal.

The reporting of tuberculosis is practically ignored except such information as reaches this office through clinics, our Public Health Nurses and Laboratory reports. As a result of this remissness many contacts are allowed and cases developed that could and would be prevented.

DISTRICT No. 2

J. J. FRASER, D.O.H.

I have the honour to submit report of work done in District No. 2 for the year 1929.

It is hard to see measurable results in the work done in public health as a whole, which includes not only prevention of disease but prolongation of life, betterment of social conditions and correction of evil conditions of living. We are prone to say a large part of the health officers' time and energy were spent in the control of communicable diseases and let it go at that. But in the realm of preventive medicine worth-while results can surely be shown.

Of the usual diseases that occur in epidemics—smallpox, typhoid, diphtheria, etc., not one has occurred in epidemic form during the year past. The only instance that approached epidemic form in the district was anterior poliomyelitis in Collingwood township. Here there were eleven cases and one in which there was considerable doubt about the diagnosis. Of this outbreak the medical officer of health of the township says: "Of the eleven cases all were treated early with serum and we were profoundly impressed with its value."

As the preparation and distribution of the serum was initiated entirely by the Department they must feel there has been something accomplished, something done.

Many calls throughout the district were attended to during the year, some of which were concerned with public health, some were not. For example, keeping a captive wolf to breed huskies, which problem was referred to the town solicitor.

The public institutes in the district were inspected, and suggestions made to the proper authorities.

TUBERCULOSIS

Chest clinics continue to be carried on in the district through the co-operation of the staffs of the sanatoria at Gravenhurst, Freeport, Hamilton and London. The county of Waterloo has a strong organization with the sanatorium at Freeport as a centre. Guelph and the county of Wellington have a tentative programme for a campaign in the summer. If the county is covered systematically a great deal of good should result.

VENEREAL DISEASES

Slowly but surely the public is emerging from the attitude of mind of the mediaeval ages, when it was thought venereal disease was inflicted as a punishment for sin. This attitude of mind has done much to retard their prevention. Another factor that has mitigated against their lessening of incidence is the policy of hush that has surrounded them. It was not until tuberculosis was brought out into the open that any progress was made in its prevention. These diseases should be attacked by information and discussion, rather than by ostracism and discretion.

REPORTABLE DISEASES

It has been proposed that another disease be added to those already reportable. Ulcerative gingivitis, commonly called trench mouth. One peculiar feature of this disease is that in a factory, for instance, a number of cases may

appear among the workers while there are no cases found in their families. It is possible a common drinking cup may account for it in some cases, but it does not in all.

If there is a change in the regulations regarding quarantine of the minor communicable diseases, physicians and parents should realize they are still reportable. If they do not the purpose of the change will be largely defeated. It has been thought that parents have avoided calling a physician for fear of quarantine. It is hoped now they will call the local board to report any contagious disease they may have, and ask what precautions they must take to prevent others from getting it.

WATER SUPPLIES AND SEWERAGE SYSTEMS

As recommended last year the Department issued a mandatory order on the town of Southampton to install a chlorinating plant. This was done and samples since submitted have been satisfactory.

Guelph changed its old chlorinator for a new up-to-date one. A chlorinating plant was installed in one of the large hotels on Muskoka Lakes. This same hotel extended its sewerage system and is now pumping the sewage over a hill by means of an electric pump and an auxiliary operated by gasoline.

Orangeville and Palmerston had their activated sludge plants completed and in operation. Alliston installed a complete system with activated sludge disposal.

Stratford increased the capacity of its disposal plant and Kitchener has prepared plans for the construction of a new one.

In company with an engineer your district officer went over the ground at Mount Forest and at Listowel for the installation of a complete system.

SUMMER RESORTS

This year an attempt was made to introduce chlorination among the larger hotels. An apparatus designed by the Department was shown and very favourably received. Some have already installed this, and it is fully expected that more will follow this year.

More of the large hotels are employing a qualified engineer on the staff. This is a good move for the protection of the health of the guests. They are quick to appreciate the advantages of any protective measures suggested.

The tourist trade to Muskoka is increasing, and two of the largest hotels are contemplating extensions. One has begun operations to enlarge the dining room, which already seats five hundred.

A plan I would like to see more resorts adopt is the appointment of a full-time sanitary man for the summer months. For example, at Gobel's Grove last summer a plumber was installing septic tanks. The whole principle of the installation was wrong. This appointee would be worth almost his whole salary to look after the milk supply which is always a problem in these places where there are so many children.

MOTOR CAMPS AND REFRESHMENT BOOTHS

These were inspected in company with Mr. Byram of the engineering division. Sixteen were approved, four more than last year. Of the sixteen approved, thirteen have flush toilets and fifteen have municipal water supply.

Refreshment booths were a little cleaner but still leave much to be desired.

MILK SUPPLIES

More advantage is being taken of the laboratory service for making bacterial counts. I think this test gives valuable information to an inspector who reads it intelligently.

Inspection of the pasteurizing plants has been continued. This has been carried on by the engineering division. The results justify the work done and show it is quite as necessary as inspection of water chlorinating plants.

To show the importance attached to milk supplies, a health officer, in asking one to address a public meeting, will sometimes suggest a choice of two subjects—milk or public health.

The following information has been gathered about the milk supply in the five cities.

In Galt all the milk and cream is pasteurized by four pasteurizing plants. There are four vendors and sixty-five producers.

In Guelph 50 per cent. is pasteurized in two plants. There are twenty vendors and eighty-five producers. At Kitchener 95 per cent. is pasteurized. There are eleven vendors, ten of whom have pasteurizing plants. There are 184 producers.

Owen Sound pasteurizes 85 per cent. of its supply in two plants. Twenty vendors and ninety producers. At Stratford about 62 per cent. is pasteurized, all by one plant. The vendors number thirteen and the producers eighty-three.

PUBLIC HEALTH NURSING

The demonstration put on by the combined area, the townships of North and South Dumfries and the village of Ayr has been very successful. The need for such work has been fully demonstrated. It is of particular value as the section is distinctly rural. Not the least in value of the nurse's duties is the opportunity for educative work which her close personal contact with the family gives. In this case the public health nurse looks after the poor families, looks up infectious contacts, visits expectant mothers and new babies, and thus getting right into the family life gets first-hand knowledge that no one else could get.

Contrast this with the old-time era, when it was the community custom to hire a trouble-fixer, set up a board of health, make ordinances about sewer gas, general untidiness and people with smallpox, and then settle down to a life of closed windows, polluted wells, overfeeding and gin.

More information will be obtained later from this demonstration in a combined area. For example, a distribution of cost, should this be according to population or taxable property, division of work, rural and semi-rural, transportation in summer and in winter.

Every city in the district has public health nurses, and some of the towns. If we can convince the township councils that they can purchase this service at a cost commensurate with its worth a great obstacle to its adoption will be removed.

DISTRICT No. 3

D. A. McCLENAHAN, D.O.H.

I have the honour to submit the following annual report for the above-mentioned district comprising the counties of York, Peel, Halton, Wentworth, Brant, Haldimand, Norfolk, Lincoln and Welland, with a population of 1,200,000 people.

CHILD WELFARE

A large part of my district has either public health nursing service or school nursing service. Some of the rural sections are still without either form, and this is very much to be deplored. Intensive public health work has been undertaken under the direction of Dr. J. T. Phair on the township of Vaughan and in the village of Woodbridge by Miss Vrooman of the Department. Work is being also done by Miss Osborne of Port Dover. The towns of Burlington and Oakville, who formerly employed one nurse for the two municipalities, now have each a nurse of their own. We hope to further extend public health nursing service to other communities in the various counties in my district, but this can only be done after demonstration and education.

COMMUNICABLE DISEASES

I am enclosing a list of these diseases in my district furnished through the kindness of Dr. A. L. McKay, director of Division of Preventable Diseases for the Provincial Department of Health. In comparing these with 1928 I find that deaths from diphtheria are fewer in number, so that it would seem as if the campaigns for use of toxoid were showing some results.

COMMUNICABLE DISEASES REPORTED FROM BRANT, HALDIMAND, HALTON, LINCOLN, NORFOLK, PEEL, WELLAND, WENTWORTH AND YORK FOR YEAR 1929

	Cases	Deaths
Cerebro Spinal Meiningitis.....	21	5
Chickenpox.....	5,037	....
Diphtheria.....	1,651	77
Encephalitis.....	11	....
Chancroid.....	6	....
Dysentery.....	5	....
Goitre.....	16	3
Gonorrhoea.....	1,052	1
Influenza.....	457	125
German Measles.....	120	....
Measles.....	2,889	2
Mumps.....	298	....
Pneumonia.....	47	1,319
Poliomyelitis.....	85	8
Scarlet Fever.....	1,857	3
Smallpox.....	99	....
Syphilis.....	870	....
Tuberculosis.....	380	257
Typhoid.....	120	13
Paratyphoid.....	3	....
Puerperal Septicaemia.....	3	1
Tetanus.....	1	1
Septic Sore Throat.....	....	1
Tonsilitis.....	1	....
Cancer.....	1	....
Conjunctivitis.....	1	....
Whooping Cough.....	2,294	1

We are continuing the campaign for inoculation of school children and those of pre-school age. A great many municipalities are carrying on this work, and we plan to go over the children every year so as to get all the incoming ones who may not have been inoculated with toxoid. A campaign is also being carried on for the vaccination of all children in the pre-school age if possible, against smallpox. Physicians are also recommended to tell their patients who have children to bring them to their office for inoculation against diphtheria

and scarlet fever and vaccination against smallpox. If the medical profession would co-operate we could get this work done without the medical officers of health holding clinics and doing it in a wholesale way.

MILK

Nowadays the safeguarding of the milk supply is a very important problem. Much depends on the attitude and interest taken by the medical officer of health. If the M.O.H. is indifferent it is hard to get the people to take the proper interest. A number of the municipalities in my district have no milk exposed for sale except pasteurized milk. The public must be taught that though there is pasteurization of the milk, there is still just as much reason as ever for the supervision and inspection of the supply, and the way it is collected. Where the milk supply is doubtful I would recommend the public to try condensed or powdered milk.

In respectfully submitting this report to the Honourable the Minister of Health, I desire to thank all connected with the Department for kindness and co-operation.

DISTRICT No. 4

N. H. SUTTON, D.O.H.

The beginning of the year found the influenza epidemic reaching its height in most urban centres, but by the end of January, it had run its course and almost disappeared. A peculiar feature was that in nearly all areas the epidemic was almost a week earlier in the townships than in the urban centres which they surrounded. Severe enough in some cases, the general character of the disease was benign. Coming as it did during the Christmas holidays, many schools were kept closed an extra week to allow the epidemic to die down.

During last December, measles commenced to appear in Peterborough and the old-time procedure was followed, viz., waiting for notification of cases and then placarding the houses as representing isolation and quarantine, while making no effort to trace the disease outside of the family to its sources in the earlier cases, so that contacts might be got under control. The result was that the disease got rapidly out of hand, swept through the city and on to the surrounding townships, involving at least three counties during the winter months. The end of March and beginning of April saw two weeks of such bad road conditions that communication was almost at a standstill and this period, almost halted the measles in most centres. It continued with lessened force in more sparsely inhabited parts during the spring and early summer. A feature of the disease in Peterborough and the area about, was its intensity among adults, several persons over fifty years of age contracted it, although having authentic histories of having had it early in life. Some of the older victims were sick for weeks. However, if the morbidity was high, the mortality was not so.

Diphtheria continued to be present in Cobourg from the old year, but with diminishing force toward spring. Elsewhere it has not been very prevalent. The usual rise occurred with the re-opening of schools after the summer holidays, but most cases have been promptly reported, and the death list has not been

heavy. Two regrettable deaths of young children occurred south of Brighton where a surprising apathy was shown by the family—which apathy may have been due to lack of knowledge or perhaps, to a leaning toward faith healing. Some diphtheria was present during the autumn in Peterborough, but no cases occurred among those who had been immunized in the public schools, through the efforts of the school physician. By all odds, the greater numbers were among the separate school supporters in whose schools this service is not provided. Had there been a full-time health service working here and serving all the people, the city would have been practically free of this disease. I have found an increasing and practical interest in immunization by the use of toxoid to be shown in many municipalities on the part of the local health authorities, and of the people and the medical profession. The practice is spreading generally, but all too slowly.

Smallpox continued to burrow about in the northern part of Hastings county in small lumber camps and isolated neighbourhoods, but was kept under careful watch and suppressed by vaccination wherever it showed. It finally died out in the spring.

Scarlet fever has appeared in a great many places, but the cases have been few and mild. In no place did it get out of control.

Chickenpox appears to have been the popular disease during the last half of the year.

The widest public interest was, however, taken in poliomyelitis, which began to appear in the district during the latter part of August. The cases were not numerous but were widely scattered and I was called in to assist in diagnosis of doubtful cases in their early stages in almost all of my eight counties. A remarkable feature was that the few cases diagnosed too late for the convalescent serum to be of value nearly all occurred in the large centres and the only death occurred in one of the cities. This is, I think, due to the fact that the rural population still holds to the family physician idea, so that the physicians serving such areas have a closer and more intimate relation to the families employing them, than have their confreres, in the larger places where many families care little which of several physicians they call when need arises and they do not regard any of them as guide and counsellor of the family. Whether that is the correct explanation or not, the fact remains that in the presence of general uneasiness about this disease, the rural physicians were consulted early so that almost all cases occurring in their clientele were diagnosed early enough for the serum to be successfully used. In the larger centres, some cases were not brought to the notice of a physician until paralysis had set in. The forethought and effort of the Department in securing a sufficient amount of convalescent serum for the needs of the cases, cannot be too highly commended.

Rabies appeared among the dogs in Thurlow township near the Indian reserve where it was mentioned in last year's report as having been present. Mostly it has been of the "dumb" type. Investigation of such animals as are found to be rabid, generally brings out the quiet death or disappearance of other dogs within a radius of some miles. One rural physician told me, that following the death of a dog from rabies in his small village, he had learned of the quiet and unreported deaths of at least twenty dogs in the country side, in the course of some months. A dog from Stirling died in hunting camp in November, apparently from rabies of a type intermediate between "dumb" and "wild" rabies, but more closely related the "dumb" type. I believe that this disease is now a good deal more widespread than is thought and that while it remains of the "dumb" type, it will continue to spread.

Typhoid is still present in the district, though there have been no epidemics. Its continued presence has been due to carriers. The secondary cases have been few, due to the general hospitalization of the cases, or to careful concomitant disinfection. During the summer, I conducted an investigation of the presence of this disease in Prince Edward county, and was assisted therein by officers of the Department. The focus of the disease was found to be a carrier in Ameliasburg township. This man, after a visit to friends in the U.S.A. developed the disease on his return home in the autumn of 1927. The attack was brisk but brief and not of the usual type. It was not diagnosed typhoid. He made a good and speedy recovery and since then continued to assist in the production of milk on the farm. In the summer time, this milk was sent to the local cheese factory. Since his illness, seventeen cases of typhoid have been found to have occurred at varying intervals, almost all of which have been treated in different hospitals and reported from time to time in the municipalities where the hospitals were. Only one case was reported in this township, where it was duly quarantined, etc. Two of the cases died of the disease. Of the seventeen cases, six were traced directly to products of the cheese factory to which the milk from this farm was sent, while three others were secondary to two of the six cases. Six of the remaining cases had been working or visiting at this farm and in four of them, milk was the deciding factor. One case was in a house within easy fly carrying distance. Typhoid bacilli were found to be still present in the intestines of the original case who has now been forbidden to take any part in the production of milk.

The investigation took in the processes involved in the making of cheese at this factory which is fairly typical of these enterprises in the district, and I believe in the province. At the farm, the evening's milk is placed in the large can on the milk stand; the morning's milk is added prior to transportation to the factory. The milk is weighed in and mixed in the vats, except that of one of the best producers, which is used as a "starter." Vat temperature is raised to 100°-102° and maintained during setting of the curd. The whey is then run off, passed through a separator to get out the butterfat and then to a tank where it is supposed to be pasteurized and later delivered back to the farmers in the milk cans. The butterfat is sent to a creamery where it is pasteurized before being made into butter. In the whole process of cheese making, the milk or curd is not outside the temperature of bacterial growth, so that it is easy to see that any typhoid germs which may be introduced by a carrier, are multiplied many times in the twenty or more hours of processing. The processing, too, is not what it should be. The farm utensils and methods of production are not always of the best. The water supply of the factory was bad, the piping through which the milk, etc., passes is not of the sanitary type, which it should be, so that it can be well cleaned and sterilized. The washing and other toilet facilities are bad, insufficient or lacking. Flies are numerous and have easy access to milk and curd.

Late in June an outbreak of food poisoning occurred at and following a church social near Bowmanville. Investigation of this by myself and officers of the Connaught Laboratory showed this to be due to cheese which had also caused similar attacks among private purchasers of the same product. This was traced back to a cheese factory in Manvers township, and harmful effects occurred only in eating of five cheeses supplied to a merchant in Orono, and in turn, three of these sold by him to merchants in Bowmanville and Newcastle. The cheeses were then nearly ten months old and no harmful germs were found in copious samples taken from them, but there had apparently been a breaking

down or altering of the proteins of the cheese. It only affected about half of those who partook of it and the illness produced was that of a more or less violent digestive upset, which cleared up in a few hours and left no permanent result.

MOTOR TOURIST CAMPS, REFRESHMENT BOOTHS, SUMMER RESORTS, ETC.

The inspection of these enterprises with one of the staff of the Sanitary Engineering Division showed little that was new. The increase in their numbers was almost entirely in those providing cabins, while several of the camps already established were now erecting cabins. The day of the tent seems about over in this line. A few of the places showed improvement in sanitation, such as to merit approval for the first time, but until they are all licensed and must meet minimum requirements, little real advance can be expected. The fresh air camps are improving and will soon be real healthful places. Increase in numbers is slight, but improvement in proper sanitary and other equipment is general. There was this year almost no interference with their programmes due to communicable diseases. The closer check-up of the children prior to leaving city for camp contributed a good deal to this desirable state of affairs.

The sanitation of groups of cottages on lakes and rivers still leaves much to be desired. Where these are in well organized municipalities, I have been urging the local boards of health to make regulations governing the sanitation and with the municipal councils, to provide services such as garbage and night soil collection, the cost of which can be assessed against the properties served. Where this has been done in whole or in part, it has worked well and gives general satisfaction. This is new work for these municipalities, but they are beginning to see that it must be undertaken if their profitable summer's business is to be preserved.

The year has seen a considerable growth toward the movement to establish sanitary services in smaller urban municipalities, in the shape of water and sewage works. The source of water is now sought by drilling deep wells. Tweed has undertaken the two systems and will be glad it did so, though at present the revulsion of feeling will probably dismiss all the old council at the end of the year. The sanitary surveys being made in many towns and villages by our Sanitary Engineering Division are bringing home to the people, the fact that the older a village gets, the greater will become the pollution of its shallow wells.

There is a very hopeful growth of health sentiment among the people of most municipalities, which growth I have endeavoured to foster. I am pleased to say that I have had the co-operation of many M.O.H.'s in this endeavour. Some of them are giving very good health talks to the pupils when they visit schools for the annual sanitary inspection. Others are acceding to the requests from Women's Institutes for health addresses. Some of them are trying to get medical examination of pupils started. On my own part, I have addressed eight Women's Institutes gatherings in five counties and had a part of the programme of a short course for young farmers. I have been much impressed by the keenness of these people on health matters and especially by that of the Women's Institutes. I purpose engaging in all of this work which I possibly can, as it is one of the most helpful channels of public health education to which I have access. The spread of knowledge of this sort will prepare the way and create a demand for full-time health units when they come in view.

In general, I would testify to the spirit of co-operation shown by the M.O.H.'s of the district. Many of these men are doing much more than they are paid for in the interest of the health of their people and are leading them

on in the ways of health knowledge. Some are content to sit still and a few are antagonistic to public health progress. Most see clearly enough the inherent weakness of the part-time system and would welcome the advent of full-time units.

I would also wish to express gratification for the helpful co-operation of the various divisions of the Department which has greatly aided me in the work.

DISTRICT No. 5

PAUL J. MOLONEY, D.O.H.

I have the honour herewith to submit my annual report for the year 1929 for District No. 5.

Owing to amendments to the Health Act in 1927, District No. 5 now consists of the counties of Dundas, Stormont and Glengarry, Leeds and Grenville, Frontenac, Lennox and Addington, Lanark, Renfrew, Carleton, Prescott and Russell, and the cities of Ottawa and Kingston, the total acreage being 5,570,763 and the population approximately 500,000.

The central office, which for many years has been located in the city of Ottawa, continues to be utilized as a source of information and a public health centre to an increasing extent each year, through personal interviews, by letter and telephone. The latter means of communication is particularly noticeable by its increase, scarcely a day passing without many long distance calls from health officers, boards of health, municipal councils, and others connected with public health matters. Communications now received by letter exceed 4,000 annually.

All the public institutions, thirty-four in number, have been inspected regarding their sanitary condition and reports sent to the Provincial Department of Health, and, where indicated, to the governing bodies. A request for the elimination of unsanitary conditions, or for the installing of needed improvements, has generally been promptly met by those in charge of the management. Requests for the investigation of special conditions existing in different localities in the district have been promptly responded to when at all possible, and, if justified, vigorous action has been taken in regard to the sanitary conditions.

I desire to record the hearty co-operation and valuable assistance received from the various divisions under the control of the Provincial Department of Health, and also from the Inspector of the Ontario Department of Labour, the Provincial Public Health Nurses, the Mothers' Allowance Board and Inspectors, the Federal Veterinary General's Department, and the Canadian Tuberculosis Association.

Besides the reports which cover the work each month which are sent to the Department, special reports, dealing with, and giving information in detail concerning important conditions which have arisen have been sent to the Department during the year.

COMMUNICABLE DISEASES

Smallpox.—This disease, although quite prevalent in the district during the year, was in the great majority of cases of an exceedingly mild type with no deaths. The Upper and Lower Ottawa Valley were parts most affected. Besides a large number of sporadic or single case outbreaks, a rather severe

outbreak occurred in Caledonia township, where about 50 cases occurred. The M.O.H., Dr. Metcalfe, took energetic action, aided by the local board, in controlling this outbreak. A thorough vaccination campaign was carried on, and the outbreak was completely wiped out in a short time. The neighbouring municipalities also took action by way of precaution to prevent the spread of the disease.

In November and December an outbreak of similar dimensions occurred in South Plantagenet, which, at the end of the year, was apparently well under control.

Scarlet Fever.—For the first months of the year this disease was epidemic in and around the town of Cornwall. It was of a very mild type and very difficult to control. The town and township appointed special nurses and inspectors, but it was well on in the year before the epidemic abated.

Towards the end of the year a widespread outbreak of this disease appeared in the city of Ottawa. It is still quite prevalent in the city as the year closes.

Typhoid Fever.—With the installation of chlorination in connection with mostly all public water supplies, and with the careful inspection carried out by the Provincial Sanitary Engineers, this disease is pretty well eliminated as a public menace in this end of the province. Sporadic cases still occur and it is a question whether we will be able to get rid of this irreducible minimum unless some new methods are devised to deal with it.

Rabies.—This disease has caused grave concern during the year. If anything it is on the increase over the year previous. A very large number of domestic animals have died from it, and two human beings. Great care and promptness have been shown by the laboratory in supplying antirabic vaccine for the treatment of all persons exposed to infection from rabid animals.

In my opinion the present method of controlling this disease in animals, and through them in human beings, is altogether inadequate, and I do not think that the province will ever become rabies-free unless some other and more comprehensive method is adopted.

Trachoma.—A rather peculiar and very interesting outbreak of this disease occurred in the village of Lanark, and assumed the proportions of an epidemic, there being more than 200 cases in this small village. The disease was definitely diagnosed by a leading specialist of prominence. The two attending physicians laboured vigorously every day for months to get the outbreak under control, in which they succeeded. I might state, however, that later in the outbreak the diagnosis of the specialist referred to was not confirmed by other specialists consulted.

Tuberculosis.—During the year a large number of chest clinics were held in the district by Dr. Brink and his assistants. Perhaps owing to the number of cases diagnosed, and the attention drawn to this disease, an unusual demand has been made for sanatorium accommodation. The only sanatorium in this end of the province, since the Mowat Sanatorium was closed, is situated in the city of Ottawa. The Ottawa institution was primarily intended for the accommodation of the residents of the city of Ottawa. Although this institution has been greatly enlarged recently its popularity is such that it is filled the greater part of the time by Ottawa people. Occasionally patients outside the city have gained admittance. The other institutions of the province are at a

great distance, and even in their case physicians find great difficulty in gaining admittance for their patients. Large numbers take advantage of the sanatoria in the Adirondacks, and some in the neighbouring sanatoria in Quebec.

POLIOMYELITIS (INFANTILE PARALYSIS) EPIDEMIC

On account of the prevalence of poliomyelitis in Manitoba in 1928 it was considered probable by the Ontario Department of Health that the Province of Ontario might be visited by the disease in 1929. The local health authorities were warned to be on the lookout for the disease, and to prepare a list of donors for possible serum.

The epidemic in this end of the province was centred in Ottawa, the great majority of cases having occurred in the city. Sporadic cases, amounting to about 20 per cent. of the total number, occurred in outside municipalities. The first cases occurred during the week of July 21st, and the disease had entirely subsided at the end of October.

The initial cases occurred in the west end of the district, but at no time was it widespread except in the city of Ottawa. The total number of cases reached 200 in round numbers. Of these 153 were residents of the city of Ottawa. A large percentage of the cases outside of the city of Ottawa, on being diagnosed, were at once sent to the city hospital for treatment.

With regard to the manner in which the disease is conveyed from patient to patient, I do not think that any additional information of moment has been secured by the careful observance of the manner in which the epidemic progressed in the district. In only four cases were two cases reported from the same premises. In the first instance two out of three children in a family developed the disease three days apart. The next case was that of a maid 18 years of age, who developed poliomyelitis six days after the first child was affected. In another house the only two children became ill three days apart. The fourth instance is that of two children, 2½ and 4 years, living in different apartments in an apartment house, who developed the disease two days apart. The ages of the patients ranged from seven months to twenty-five years, averaging 7.43 years, with a maximum incidence between four and five, and between eight and nine years. A noteworthy feature is the comparative rarity of the disease during the first year of life, which emphasizes the undesirability of the term "infantile paralysis."

Investigation of premises on which cases occurred did not reveal anything which would point to sanitary or social conditions, or the presence of flies, or other insects, as being factors in the spread of the disease.

It might be noted that 60 per cent. of all cases reported were males.

Controlling measures. Owing to the severe outbreak in Winnipeg during 1928, the outbreak in Ontario in 1929 was not wholly unexpected. The efficacy of convalescent serum, when given early in the disease, had been amply demonstrated in the Winnipeg outbreak. This serum is prepared from blood donated by persons who had previously had the disease, and are spoken of as donors.

At the beginning of the outbreak quite a large percentage of the cases developed paralysis. This was due largely to late diagnosis of the disease by the attending physician. Later, owing to the widespread publicity given the outbreak, and also to a circular letter of advice given the physicians, very few cases of the disease reached the paralytic stage before the attending physician had made his diagnosis.

The result of the early use of convalescent serum gave splendid results, and very few cases of paralysis resulted, dating from a few weeks after the outbreak, until its final subsidence.

At the outbreak of the epidemic considerable difficulty was experienced in obtaining a sufficient supply of serum locally. Later a systematic campaign was carried on, with the aid of Departmental officials of the Provincial Department of Health, and with the co-operation of the city of Ottawa, and an abundant supply obtained. For the bulk of this supply the Ontario Department of Health paid the donors a specific sum for each cc. contributed, and the city of Ottawa bore the travelling expenses of the donors from outside points, to and from Ottawa. Ottawa city, itself, undertook a very energetic campaign and secured the bulk of the serum used in the city hospital.

I might mention that the age of the donors, with few exceptions, was between 12 and 20 years, and the amount of blood donated ranged from 50 ccs. to 470 ccs., the average being about 200 ccs. Several of the donors contributed on more than one occasion.

The following statistics supplied by the Strathcona Isolation Hospital in Ottawa are interesting and instructive. Leaving out of account all cases admitted to the hospital which were diagnosed as some other disease than poliomyelitis, and all cases of suspected poliomyelitis, the number of definite cases dealt with was 141.

Clinical Results:

Total cases treated.....	141	100.0%
Total cases recovered completely.....	109	77.4%
Total cases recovered with paralysis.....	29	20.5%
Number died having paralysis.....	2	1.4%
Number died without paralysis.....	1	.7%

Of the thirty-one showing terminal paralysis, twenty-six already had paralysis on admission, including two of the deaths, and our experience was that once paralysis was established the serum treatment had little effect on the result. This is not saying, nevertheless, what curative effect might result from massive doses of serum or repeated injections as no experiments were made along that line.

Deducting the twenty-six cases that had paralysis on admission we have 115 cases.

Of the 115 cases,		
109 recovered completely.....		94.8%
5 recovered with paralysis.....		4.3%
(2 of which were very slight).		
1 died without paralysis.....		.9%

One of these cases which developed paralysis after receiving serum had, owing to a temporary shortage of serum received only 10 cc. on admission and developed paralysis within twenty-four hours thereafter.

As illustrating the importance of early diagnosis in preventing paralysis by means of early treatment with convalescent serum it is of interest to compare the terminal conditions of the cases received in hospital during the first four weeks of the epidemic with those admitted during the last nine weeks.

Early in the epidemic neither the medical profession nor the public was familiar with the early manifestations of poliomyelitis but after the publicity given to this disease by the press and by means of circulars and medical society meetings, much earlier diagnosis was secured.

In the first four weeks of the epidemic, 23 cases were received in hospital, 17 had terminal paralysis, 14 of these had paralysis on admission, two of whom died; three developed paralysis after receiving serum, all within twenty-four hours; six recovered without paralysis.

Of the subsequent 118 cases, 107 recovered completely, eight had paralysis on admission which in some cases was slightly improved on discharge; two developed paralysis after treatment but so slight as to be difficult to diagnose; one died without paralysis.

Whether this bears out the contention that most epidemics of poliomyelitis are more severe at the beginning or whether it were altogether due to the earlier diagnosis, cannot be answered except to say the average time the total of 31 paralysed cases were ill before a diagnosis was made was $4\frac{1}{2}$ days. The average time the unparalyzed cases were sick before diagnosis and treatment was $1\frac{1}{2}$ days.

I wish to acknowledge the very valuable information supplied to this Department by Dr. Lomer, M.O.H. of the city of Ottawa, and Dr. Shirreff, Superintendent of the Strathcona Hospital.

PUBLIC HEALTH NURSES

During the year, owing to previous public health demonstrations, a permanent full-time public health nurse was appointed in Perth, and also in Renfrew.

Public health demonstration, the early part of the year, was given in Prescott, and the neighbouring township, by Miss Lunn. The work was much aided by a demonstration of child welfare clinic, given by Drs. Phair and Kiteley. Both the town and the township councils expressed a strong desire to have a permanent public health nurse appointed, but, owing to financial uncertainty regarding the outcome of the new harbour works, and the expenditure incurred by the municipalities in connection therewith, they decided to postpone the appointment until another year.

Miss Lunn is continuing her demonstration in the north country, centering on Barry's Bay.

Miss Squires, after her very fine demonstration of public health nursing in the town of Perth, which was followed by the appointment of a permanent public health nurse, continued her work in the four surrounding townships. This demonstration was asked for at a meeting of the combined municipal councils of these townships, at which meeting it was intimated that if it was shown that rural work could be carried on during the whole year they would secure a public health nurse permanently.

Besides the regular work, the two nurses mentioned above have given valuable service in dealing with emergency conditions which have arisen in different parts of the district.

A movement is on foot in Dundas county, with every appearance of success, to engage two permanent public health nurses, one for the two northern townships, and the villages of Winchester and Chesterville, and one for the two southern townships, including the town of Morrisburg, and the village of Iroquois.

Other items with regard to which a short reference should be made:

WESTBORO

The municipality of Nepean having engaged the engineering firm of Jas. Protcot & Redfern, have had plans prepared for the installation of a municipal water and sewer system. The only point now remaining to be decided upon

is the source of the water supply. The engineers have suggested deep wells, but the majority, I think, of the ratepayers are in favour of purchasing their water supply from Ottawa city.

TOURIST CAMPS, SUMMER RESORTS AND WAYSIDE RESTAURANTS

These have been thoroughly inspected during the year. The latter have greatly increased in number. On the whole these places have been conducted in a better manner than in previous years. No increase in approval signs have been granted to the tourist camps, but a marked increase in the approval signs for wayside restaurants is noted.

SEWER GAS IN MUNICIPAL DRAINS AND SEWERS

Ever since the violent explosions in the Ottawa sewers, in the early part of the year, great nervousness has been shown in the other municipalities regarding this matter, and frequent requests for inspections have been made to this office, and the Sanitary Engineering Division. Although the committee on investigation has been sitting during the year in connection with the Ottawa explosions, they do not seem to have arrived at any definite decision as to the cause of the explosions.

HARBOUR WORKS AT PRESCOTT AND CHAT'S FALLS

Extensive operations are being carried on at these points. A large number of men are employed in construction work. These have presented a wide variety of sanitary problems, and some difficulty at times has occurred to induce the contractors to conform to sanitary regulations.

DISTRICT No. 6

W. E. GEORGE, D.O.H.

I have the honour to submit herewith my Seventeenth Annual Report for the area comprising the districts of Temiskaming, Nipissing, Parry Sound, part of the district of Cochrane and part of the district of Sudbury. Health District No. 6 is entirely without county organization.

PERSONNEL

- | | |
|---|---------------------------------|
| I. District Officer | W. Egerton George, M.D., D.P.H. |
| II. Public Health Nurses | Miss Rose Hally |
| | Miss E. Smith |
| | Miss Margaret Nealon |
| | Miss K. E. Osborne |
| | Miss M. E. Hopper. |
| III. Sanitary Inspectors | John Richardson |
| | Hugh McIntyre |
| | David McKee. |
| IV. Laboratory—Director | W. A. R. Michell, M.B., D.P.H. |
| —Technician | John Lawson. |
| V. Office Clerk and Steno-
grapher | Miss Roma Langlois. |

LABORATORY

The laboratory has steadily improved its usefulness both by service to the district and by co-operation with the field staff in providing important information relative to the incidence of communicable diseases, particularly, typhoid, diphtheria and tuberculosis, and relative to the quality of milk, water and ice supplies.

The laboratory at North Bay closed its doors for five weeks from August 10th to September 14th to permit of improvements which were already overdue, namely, complete renovation of the building. It was at least another week before the contractor could provide sufficient space to give laboratory attention to all specimens.

In spite of this loss of time, the laboratory examined thirty per cent. more specimens than during 1928. The closing of the laboratory during the holidays of the staff should, in the opinion of the district officer, be discontinued if possible, since each year it causes the loss for several months of a number of important patrons.

The North Bay laboratory gives a larger proportion of its time to the service of the district than any other departmental branch laboratory, especially is this so when the total number of specimens examined is compared to those received from municipalities outside that in which the laboratory is located. Usually the municipality in which the laboratory is situated provides from forty to fifty per cent. of the total specimens examined. North Bay supplied less than twenty-six per cent. At no other point in Health District No. 6 could a laboratory be placed that would permit the outside patronage obtained by the present location. As a depot for the distribution of biologicals, the North Bay laboratory is serving an irreplaceable need.

SANITARY INSPECTORS

During the year a more satisfactory basis of co-ordination was established between the sanitary inspectors and the other officials of the Department. A great deal of overlapping was thus eliminated which has contributed greatly to the friendly relations between them.

The elevation of Mr. W. Millar to the position of Chief Sanitary Inspector, made vacant by the resignation of Mr. Alex White, has contributed in no small way to mutual confidence.

Mr. John Richardson, located at North Bay, has charge of camp sanitation and environmental conditions in unorganized areas in the district of Nipissing and as far north as Earlton in the district of Temiskaming, as well as the east side of Parry Sound and Muskoka.

Mr. Hugh McIntyre, located at Kirkland Lake, has charge of camp sanitation and environmental conditions in unorganized areas as far south as Earlton in the district of Temiskaming and the whole of the district of Cochrane.

Mr. David McKee, located at Sudbury, has charge of similar sanitary problems in the district of Sudbury and the west side of Parry Sound and Muskoka. Mr. McKee's area is partly in Health District No. 8, and partly in No. 6.

PUBLIC HEALTH NURSES

Miss Rose Hally, during the past year, has made her headquarters in Cochrane and from this point has inspected all the school children and visited their homes in the townships of Calder, Clute, Glackmeyer, LaMarche, Brower and Fox, including Cochrane. Having secured the co-operation of the Northern

Ontario Relief Commission to defray the cost of physicians' services, an active campaign was carried on to immunize the rural school children against diphtheria. Three inoculations of toxoid were administered to the children of twenty-two rural schools under most difficult conditions. To this must be added the large town schools of Cochrane, both public and separate.

During June and July an extensive epidemic of measles occurred in Cochrane with 357 cases and two deaths. Some five adults came down with the disease. During this outbreak, Miss Hally's services were made available to the local board of health. Two citizens were taken before the Magistrate for neglecting to report cases in their homes.

Dr. Ross of the Dental Division visited the rural schools in Glackmeyer and Clute and inspected the children's teeth, making the necessary corrections and repairs.

Miss H. Elizabeth Smith makes her headquarters in New Liskeard. During the year, this nurse made the necessary arrangements and supervised the administration of toxoid in the schools at Elk Lake, Boston Creek, Dane, Earlton, Englehart, Charlton, Larder Lake and Gowganda. Usually this work was performed by local physicians, but sometimes it was necessary to have it done by Dr. Kitely, of the Child Hygiene Division.

School inspections were made in the following townships—Henwood, Kerns, James, Savard, Sharp, Cane, Evanturel, Armstrong and Hilliard. A few cases of chickenpox, mumps, whooping cough, scarlet fever, and infantile paralysis were found, but with the exception of one or two rural schools, the outbreaks were not sufficient to necessitate the closing of the schools. During the examination of school children, special attention was given to deficiencies of vision with the hope that means might be found for the correction of their defects.

Dr. Ross of the Dental Division visited the rural schools in the above-mentioned townships, inspecting and repairing the children's teeth.

Miss Margaret Nealon made her headquarters in Cobalt during the past year.

Miss Nealon completed a careful survey of the vision of children in the schools at Latchford, Temagami, Moore's Cove, North Cobalt, Mileage 104, Geroux Lake, Lorraine Valley, West Cobalt, Silver Center, Maidens, Haileybury, Gillies Depot, township of Firstbrook and Clove Valley. The nurse was then able to interest the Rotary Club at Haileybury and the Kiwanis Club at Cobalt to provide ways and means of having these children with defective vision corrected. These clubs arranged transportation and had 250 children with eye defects examined by a competent oculist, and those unable to pay for glasses are being supplied at the expense of these service clubs.

Of course, the Northern Ontario Relief Commission and the Department of Health were asked to contribute important assistance to this effort, but the end result was that a very fine piece of remedial work was completed, and that as a direct result of the educational work of one of our Public Health Nurses. Miss Nealon is to be congratulated on this accomplishment. It was a most commendable effort as it is entirely new ground in this district.

Miss K. E. Osborne made her headquarters in Powassan in the district of Parry Sound and worked the villages and towns along the railroad, south of Powassan as far as Katrine. Her efforts were largely school inspections and home visiting. The work was somewhat discouraging because of the exceedingly large number of defects found, especially oral defects, and the small number of corrections.

However, at Burks Falls she was able to interest the Women's Institute to sponsor a tonsil clinic with the result that about fifteen children had their diseased tonsils removed.

Miss Osborne's work was handicapped for want of a car, as the work supervised by her has been gone over on three previous occasions by other nurses of the Department. The rural areas were making many requests to have their school children examined, but this work had to be postponed for the above reason, but it is a matter of urgent importance which should be provided for during the coming summer.

Miss M. E. Hopper makes her headquarters in Sudbury.

Part of Miss Hopper's time is spent in Health District No. 6. Her duties take her on the various lines of railroad, a distance of approximately fifty miles from Sudbury. During the months of April and May, an outbreak of smallpox occurred in Capreol and Miss Hopper made an investigation through the schools with the result that all cases were quickly discovered and brought under quarantine. The contacts were vaccinated and the epidemic promptly subsided.

COMMUNICABLE DISEASES

(RETURNS)

	1929	1928	1927
Cerebro Spinal Meningitis.....	15-1	5-4	2-2
Chickenpox.....	221	125	83
Conjunctivitis, acute infectious.....	8	3	0
Diphtheria.....	34-2	55-2	53-3
Gonorrhoea.....	177	127	60
Influenza.....	275-5	119-1	37-1
German Measles.....	2	1	25
Measles.....	463	155-1	547
Mumps.....	267	258	131
Pneumonia:			
Acute Lobar.....	19-10	26-6	26-8
Bronchial.....	28-6	11-7	13-8
Poliomyelitis.....	9-1	4-3	0
Scarlet Fever.....	74-2	90-2	89-1
Septic Sore Throat.....	6	62	9
Smallpox.....	121	43	42
Syphilis.....	117	56	21
Tuberculosis.....	19-3	12-4	38-1
Typhoid.....	54-3	23-2	32-1
Whooping Cough.....	233-2	66-1	41
Deaths from all other causes.....	406	356	....

As stated above, the laboratory returns on diphtheria, typhoid and tuberculosis have served to give a great deal of useful information not contained in the weekly reports from secretaries of local boards of health. As laboratory specimens come directly from the physician, it is possible that a few cases may have originated in territory without municipal organization. In such cases, there would be no weekly returns, but this would hardly account for the spread between positive specimens from the laboratory and the number of cases reported by secretaries of local boards of health; nor can carriers of typhoid and diphtheria and old cases of tuberculosis satisfactorily explain the discrepancy.

A comparison of the total positive reports from the laboratory with total reports from local boards indicates that either the physicians are not reporting their cases or the secretaries of local boards of health are neglecting their duties in making returns.

TYPHOID

From Timmins there were positive widals from eighteen cases of typhoid throughout the year. Twelve of these were obtained during January and February. A careful investigation failed to place the blame on the water or milk supply. Timmins, however, has had a bad record for typhoid since the epidemic in Cochrane in 1923. The season at which this recrudescence occurred, together with its distribution, suggested either milk or water, but it has been impossible to prove the source. To express an opinion that one suspects the water is to impute blame to the operator of the chlorination equipment. It is unjust and entirely too easy to explain obscure epidemics of typhoid by such means. Although one appreciates that it is almost impossible to detect any inefficiency in the operation of the chlorine plant, since this is likely to be recognized and corrected by the pump man before any other could obtain any knowledge of the suspension of chlorination, yet this does not prove negligence on his part. Much more evidence is required before any blame can be placed. The possibility of milk being the source was set aside since milk was obtained from seven different dairies.

Kapuskasing.—There were twelve positive widals reported from Kapuskasing in March, April, and May. These cases were all living in the squatters' section of the town and were considered by the Medical Officers of Health to be contacts of carriers as they were members of families or relatives of those who had typhoid the previous fall. The section of the town provided with a public water supply and sewers did not suffer from typhoid.

Callander.—Toward the close of the year, ten cases of typhoid occurred in Callander of which three died. The source was traced to a small stream which runs between two houses and behind a third house. There were three, four and three cases in these buildings respectively. Creek water was used for drinking purposes by the first patient, and others were suspected of using it both for drinking and washing.

SMALLPOX

The mild type of the disease made its appearance in many places during the year. There were 121 cases reported with no deaths. Frequently, as in Capreol, it was superimposed upon an epidemic of chickenpox. At first this led to errors in diagnosis, but the history of the onset and the distribution of the rash soon led to correction in individual cases, and then rapidly to a more careful diagnosis of existing and subsequent cases.

Each outbreak was characterized by definite limitations. Only the unvaccinated contracted the disease, so that each new case was followed by a campaign of vaccination. While there were many small outbreaks, only in Capreol did it reach epidemic proportions. At this point, there were seventy-five cases in April, but as soon as vaccination became general the epidemic ended.

The symptoms were of such a mild type in many instances that the services of a physician were not required. Many of these cases were neither recognized nor reported, with the result that it was almost impossible to keep the disease in complete control.

In the French-English Model School at Sturgeon Falls, eight or nine cases developed in May toward the end of the school term. All students were

immediately vaccinated by the medical officer, Dr. Paul O. Coulombe. No new cases developed. The prompt action of Dr. Coulombe prevented the loss of a year to many of the students of the school.

MEASLES

The only serious epidemic in this district which occurred in 1929 was one in Cochrane in May and June. There were altogether 357 cases and two deaths. Only five adults took the disease. An earnest effort was made by the health authorities to control the disease. The nurse visited the schools and sent home all children who showed the first symptoms of measles. The nurse was particularly well informed on the initial symptoms with the result that the child was removed from the class room from twenty-four to forty-eight hours before the occurrence of the rash. All houses in which the disease existed were placarded and quarantined. Strict attention was given to contacts and legal action was taken against parents who neglected to report cases in the family. In spite of all this, the number of cases rose to 357, so that one was forced to the conclusion that no matter how effective these measures are when applied to first cases, they are of very questionable value when measles has reached epidemic proportions. I believe for this reason that the Department should issue a written advice to District Officers and local authorities indicating the hopelessness of controlling this disease after the epidemic has gotten under way, and also indirectly.

In Kirkland Lake there was quite a large number of cases in April, but the authorities did not secure reports from many cases so that it was quite impossible to state even approximately the number.

TUBERCULOSIS

More than twenty-five per cent. of all the laboratory reports of positive sputums from Health District No. 6 came from Sudbury. The Medical Officer is of the opinion that they have no excessive amount. His opinion is that their physicians are a little sharper at detecting it than are the general run, but I fear that the continuous reporting of large numbers of cases of tuberculosis from Sudbury from year to year cannot be explained by the cleverness of the physicians in detecting them, since this should result in a rapid decline in the incidence and since positive sputums are an indication that they are not being recognized at the proper time. Unfortunately more of these patients have to be treated in the home than formerly as the sanatoria of the province have insufficient beds to meet the requirements. Unless these can be supplied immediately, it is feared that the splendid progress being made in recent years is likely to have a serious setback; indeed, this deduction is substantiated by a slight increase in the tuberculosis rate this year for the province.

IMMUNIZATION

In Capreol about 1,000 were vaccinated during the epidemic. In East Ferris, Callander, Bonfield and Bonfield townships all school children were vaccinated. School children in Sturgeon Falls, not already vaccinated, were vaccinated as well as the students in the Model School. Vaccination of school children was carried out in Iroquois Falls, Verner, Earlton, Field and Powassan. Seven hundred and eighty-four school children were vaccinated in North Bay, besides several hundred in the pre-school age.

Toxoid was administered in some fifty rural and urban schools. Many mothers availed themselves of the opportunity to get their pre-school children immunized against diphtheria. In North Bay, Dr. Ranney, the Medical Officer, has personally carried out a creditable piece of work in administering toxoid to 2,000 children.

WATER SUPPLIES

The water supplies of this district were never as safe as they are at present. Every municipal water supply is considered safe, and is protected by chlorination, filtration or both; a few not so treated have satisfactory ground water.

Capreol.—The last municipality, with a population over 1,000 and without a proper water supply, obtained one this year from deep wells. Capreol has a population of 2,500. It is almost entirely a railroad town.

North Bay.—Spent a great deal of money for a new pump-house, an intake in a more satisfactory location, a new reservoir and main to the town. However, the year closed before this new equipment could be put into operation.

Kirkland Lake.—Having completely outgrown the old water service on the main street, was compelled to lay a second main parallel with the first. To do this, it was necessary to blast out solid rock throughout its whole length. The work was not so extensive as it was costly.

SEWERAGE

Capreol.—A new sewer system was installed this year which will serve a very large proportion of the town. Only a few houses in the outlying areas will be without sewer facilities. The sewage will have sedimentation treatment before being discharged into the river. The river has shown serious pollution by samples taken over several years, so that the river is unfit for domestic purposes. For this reason, the danger of the effluent from their tanks will be reduced to a minimum.

North Bay.—The Provincial Sanitary Engineer visited North Bay during the year and indicated to the Medical Officer and City Engineer that the sewerage system was tending to become a group of small systems, not one of which has adequate disposal, but all have separate outfalls. The local authorities were advised that plans should be prepared to bring all this sewage to one point as the city would be required within a reasonable time to adequately treat it before discharging into Lake Nipissing. This could be done more cheaply in one plant.

Timmins.—The town of Timmins has outgrown its sewage disposal plant. The plant is of the activated sludge variety. The sedimentation tank which received the activated sewage is of insufficient capacity and the hopper bottom is of the square or four-sided type. As a result, the sludge which sticks in the corners is not lifted with the sludge pump, causing the effluent to become septic.

Sudbury.—Sudbury in the past year and a half has made a very rapid growth in population. The population has grown from 12,000 last year to 16,000 at the time of this year's census. This growth has taxed the capacity of some of the sewers and has caused nuisance in the creek into which the main sewer emptied. It will be necessary for the town to connect up some of the small outlets emptying into the creek by a trunk sewer and all sewage should

be carried to one point where it could be treated. The local board of health has this matter well in hand for next year.

Cochrane.—The activated sludge plant was working satisfactorily when examined by the Engineers of the Department.

MILK SUPPLIES

Cochrane.—A careful survey was made of all dairies supplying milk to Cochrane. A detailed report was sent to the local authorities on the findings. Many things are required in the way of equipment, yet with two or three exceptions, their chief deficiency was the want of cleanliness. Inadequate facilities for cooling milk, poor floors, cows tied with chains and ropes with heads against the walls, lack of frontal feed passages, no heating plant in the milk-house are gross mechanical defects which accentuate this want of cleanliness. The Chalmer's Dairy was much the best, but the Tibideau Dairy, although the barns were unsatisfactory, gave such good counts and the milk was handled so cleanly that it is deserving of honourable mention.

Timmins.—One supply, which is shipped from New Liskeard, has continued to be the chief source of trouble. Although the product from this firm is alleged to be pasteurized, the bacterial count when reaching the consumer is much higher than locally produced unpasteurized milk. Indeed, it has been proven that this high count is due to dirt in the milk coming from the producer.

This office has not sufficient staff to supervise all local producers, and to take such action as will prohibit their produce from reaching the consumers. Local officers, however, have this authority, and Timmins is seriously contemplating the exercising of this power. Indeed, the bacterial count of other products of this firm, such as ice cream, is so high at times that the local authorities feel that they have a serious responsibility for permitting the continuance of the sale.

Haileybury.—A careful survey was made of the premises of all producers in the month of May. The premises of one firm were reasonably satisfactory and the bacterial count on the product has substantiated the local sanitary findings. A recommendation was made that one dairy be closed until more satisfactory surroundings were provided; although stable conditions were bad in this case, the handling of the milk was reasonably good. Other dairies had dirty stables, dirty cows and dirty milk-houses. A report was handed to the local board of health to be used as a basis of correction.

TOURIST CAMPS

In company with the District Superintendent of the Forestry Branch, all tourist camp sites were inspected along the highway between North Bay and Latchford. Water samples were obtained and efficient measures undertaken to chlorinate those with a high bacterial count. Privies were made fly-tight and were scrubbed out twice a week. Garbage pails were provided with fly-tight covers. These were emptied regularly twice a week. The provision of electric lights at Wilson Lake and Martin River camps added greatly to their sanitation. Tilden Lake, Martin River and Wilson Lake camps were given approval signs from the Department. The camp sites at North Bay and Sudbury were inspected and given approval.

DISTRICT No. 7

G. L. SPARKS, D.O.H.

I beg to submit for your information the following outline of my work during 1929 in District No. 7, which includes the districts of Thunder Bay, Rainy River, Kenora and Patricia.

On July 2nd I returned to duty in the district after nine months' leave of absence, and this report covers the period from July 2nd to December 31st.

MOTOR TOURIST CAMPS AND REFRESHMENT BOOTHS

The annual summer survey of motor tourist camps and highway refreshment booths was commenced on July 15th. Mr. G. M. Galimbert (Assistant Engineer), was detailed to accompany me on this work. Seven motor tourist camps and sixty-one refreshment booths were visited in the districts of Thunder Bay, Rainy River and Kenora, three approvals being issued to motor tourist camps and six approvals to refreshment booths. Owing to the excessive amount of travelling necessary to cover the territory this work was not completed until September 2nd.

MUNICIPAL MILK SUPPLIES

During the period July 15th to September 5th, Mr. Galimbert and I inspected the milk supplies of the following municipalities:—

(A) Raw Milk Dairies.

(1) Fort William—three dairies representing a daily delivery of about 180 gallons, approximately 10 per cent. of the city milk supply.

(2) Port Arthur—thirteen dairies representing a daily delivery of about 250 gallons, approximately 23 per cent. of the city milk supply.

(3) Fort Frances—nineteen dairies representing about 95 per cent. of the town milk supply.

(4) Rainy River—five dairies representing a daily delivery of about 370 quarts.

(5) Kenora—six dairies representing a daily delivery of about 690 quarts.

(6) Keewatin—two dairies representing a daily delivery of about 330 quarts.

(B) Milk Pasteurization Plants (Inspected by Mr. Galimbert)

(1) Fort William—four plants (two having distributing depots in Port Arthur) representing about 90 per cent. of the Fort William milk supply and about 60–65 per cent. of the Port Arthur milk supply.

(2) Kenora—one plant representing about one-third of the town milk supply.

(C) Thirteen milk producers selling to pasteurizing plants in Fort William.

It is the writer's opinion that the above municipalities should institute a more intensive supervision of their milk supplies. Many producers evidently make little or no effort to maintain reasonable sanitary conditions in connection with the operation of their dairies. However, an adequate inspection service is impossible unless the inspectors are provided with means of transportation and are able to devote the necessary time to the inspection of dairies. Under existing legislation the municipalities are responsible for the supervision and control of their milk supplies. Surveys during recent years in District No. 7

have demonstrated the impossibility of an adequate discharge of this responsibility with the inspection services provided. In any event the control of milk-pasteurization plants demands such a degree of technical engineering knowledge that all pasteurizing plants should be legally under the control of the Sanitary Engineering Division, and the supervision of these plants placed on the same basis as the supervision of municipal water chlorination plants.

At meetings of the local boards of health of Port Arthur, Fort William, Fort Frances and Kenora, the milk supplies of the respective municipalities were thoroughly discussed. The local health authorities were urged to provide more adequate inspection at the sources of production, and we emphasized the public health value of the pasteurization of all milk intended for human consumption.

Mr. Galimbert has submitted detailed reports regarding the above milk supplies to Dr. A. E. Berry, Director, Sanitary Engineering Division.

WATER SUPPLIES

The inspection of water chlorination plants has been carried on as usual by the Sanitary Engineering Division, and whenever it appeared necessary I have urged local medical officers of health to satisfy themselves that the instructions were being complied with at the pumping stations. As in former years, the owners of Great Lakes steamers have been notified whenever laboratory reports have been received indicating pollution of water samples collected from their respective steamers while in port at Fort William or Port Arthur. The collection of water samples is carried on at the head of the lakes by a laboratory technician acting under the jurisdiction of the Department of Pensions and National Health, the samples being examined at the Branch Laboratory in Fort William. Recently this work has been extended to include passenger trains in inter-provincial traffic.

On September 16th and 25th I accompanied the local M.O.H. on inspections of the water supply system at the Provincial Industrial Farm in the municipality of Neebing. Samples collected from this water supply have at intervals been found to be polluted, and it has been difficult on inspection to discover the source of pollution. Reports of inspections were forwarded to the Deputy Minister of Health with a request that a sanitary engineer be instructed to go over the water supply system. A number of useful suggestions received from Dr. A. E. Berry, Director of the Sanitary Engineering Division, were forwarded to the Superintendent of the Farm, and I was advised by Dr. Berry that an engineer would visit the Farm when on his next trip to the water chlorination plants in the district.

SEWAGE DISPOSAL, NIGHT SOIL, MANURE AND GARBAGE DISPOSAL

While carrying on the summer survey of municipal milk supplies, motor tourist camps and highway refreshment booths, I accompanied Mr. Galimbert on the following inspections which Mr. Galimbert has reported in detail to the Director of the Sanitary Engineering Division:—

<i>Nature of Inspection</i>	<i>Date of Inspection</i>
(1) Minaki Lodge (C.N.R.), septic tank.	July 16th.
(2) Nuisance caused by septic tanks and cess-pools in Sioux Lookout.	July 17th.

- | | |
|--|------------------------|
| (3) Ventilation of lavatories in Dorion Consolidated School. | Week ending July 27th. |
| (4) Condition of privies in Keewatin. | August 28th. |
| (5) Condition of nuisance grounds at Kenora and Keewatin. | August 28th. |

The unsanitary conditions in Keewatin and Kenora were brought to the attention of the respective local boards of health on August 28th and 30th. Owing to continued dry weather during the summer months it was too dangerous for the local authorities to attempt to burn over the nuisance grounds, but there was no excuse for the disgraceful condition in which some of the outside privies were found during the inspection at Keewatin.

ROUTINE VISITS TO MUNICIPALITIES

In addition to the inspections carried on in Port Arthur, Fort William, Fort Frances, Rainy River, Sioux Lookout, Kenora and Keewatin, routine visits were also made to Dryden, Ignace, Nipigon and Schreiber. Whenever possible a meeting of the local board of health was held, and a report of the visit, with a copy of the minutes of the meeting, was forwarded to the Deputy Minister of Health.

PUBLIC INSTITUTIONS

As in previous years, inspections were made of public institutions in the district coming under the classification contained in the Public Health Act, s.s. (e), section 4.

Nineteen public institutions were inspected as follows:—

<i>Community</i>	<i>Institution</i>	
(1) Port Arthur.....	Hospitals.....	3
	Children's Shelter.....	1
	Gaol.....	1
(2) Fort William.....	Hospitals.....	2
	Children's Shelter.....	1
	Boarding School (Orphanage)...	1
(3) Neebing Township.....	Industrial Farm.....	1
(4) Fort Frances.....	Gaol.....	1
(5) Rainy River.....	Hospital.....	1
(6) Kenora.....	Hospitals.....	2
	Gaol.....	1
(7) Dryden.....	Hospital.....	1
(8) Sioux Lookout.....	Hospital.....	1
	Gaol.....	1
(9) Nakina.....	Hospital.....	1
Total.....		19

In accordance with instructions received in 1928 from the Deputy Minister of Health, a certificate of inspection was left at each of the above institutions and a duplicate of each certificate was forwarded to the Deputy Minister of Health.

COMMUNICABLE DISEASES

The following table has been compiled from the weekly returns of communicable diseases sent to this office as having been received by the Department from the secretaries of local boards of health in District No. 7, during the year 1929. The figures are not to be taken as representing the exact numbers of cases and deaths from communicable diseases, but they may have some value as an index of the communicable diseases reported from municipalities in the district:—

	Cases	Deaths
(1) Cerebro-Spinal Meningitis.....	2	0
(2) Chickenpox.....	121	0
(3) Conjunctivitis, acute infectious.....	5	0
(4) Diphtheria.....	8	2
(5) Gonorrhoea.....	37	0
(6) Influenza, epidemic.....	133	0
(7) German Measles.....	3	0
(8) Erysipelas.....	1	0
(9) Measles.....	82	0
(10) Mumps.....	57	0
(11) Paratyphoid Fever.....	2	0
(12) Pneumonia, Acute Lobar.....	13	13
(13) Pneumonia, bronchial.....	23	4
(14) Poliomyelitis, Acute Anterior.....	13	3
(15) Puerperal Septicaemia.....	0	1
(16) Scarlet Fever.....	103	1
(17) Septic Sore Throat.....	39	0
(18) Smallpox.....	8	0
(19) Syphilis.....	1	0
(20) Tuberculosis.....	11	19
(21) Typhoid Fever.....	12	0
(22) Whooping Cough.....	145	4
(23) Goitre.....	4	0

Since my return to duty in the district on July 2nd the following visits have been made in connection with the control of communicable diseases:—

(A) *Territory without Municipal Organization.*

(1) July 9th—Stirling township, district of Thunder Bay, re report whooping cough during May and June.

(2) July 11th—Suspected tuberculosis case in township of Scoble, district of Thunder Bay.

(3) July 12th—Chickenpox at Chippewa Park adjoining city of Fort William.

(4) July 16th—Tuberculosis at Redditt, district of Kenora.

(5) July 17th—Scarlet fever at Quibell (township of Wabigoon), district of Kenora.

(6) Aug. 15th—Suspect tuberculosis, township of Miscampbell, district of Rainy River.

(7) Sept. 20th—Acute anterior poliomyelitis (2), township of Sutherland, district of Rainy River.

(8) Oct. 20th—Measles at Nakina, district of Thunder Bay.

(9) Nov. 15th—Scarlet fever at Quibell (township of Wabigoon), district of Kenora.

(B) *Municipalities* (visits with local M.O.H., or as specified):

(1) Aug. 16th—Acute anterior poliomyelitis Case (1) in Shenston township, municipality of Chapple, district of Rainy River.

- (2) Aug. 18th—Typhoid fever case in town of Fort Frances.
- (3) Sept. 20th—Municipalities of Worthington and Atwood re acute anterior poliomyelitis.
- (4) Oct. 7th—Suspect cancer case (employee handling food in cook car), C.N.R. B. & B. gang at Jelly Siding (visit with Provincial sanitary inspector.)
- (5) Oct. 15th—Oliver township, suspect scarlet fever on Dr. Caldwell's Dairy Farm.
- (6) Oct. 25th—Oliver township re scarlet fever on Dr. Caldwell's Dairy Farm.
- (7) Nov. 6th—O'Connor township re scarlet fever.

Thirteen cases of acute anterior poliomyelitis with three deaths were reported by local boards of health, eleven cases with three deaths in the district of Rainy River and two cases with no deaths in the district of Kenora. Fortunately District No. 7 was spared any extensive outbreak of this disease during the late summer and early fall.

In view of the unsatisfactory train service between Fort William and Fort Frances, arrangements were made so that physicians in the Fort Frances-Rainy River area could obtain poliomyelitis convalescent serum direct from Dr. J. E. O'Donnell, M.O.H., Fort Frances. This made it possible for any physician in the above area to secure the serum in a case of emergency within two or three hours, and the physicians were advised by letter that a limited supply of the serum was available at Fort Frances.

During the month of November approximately 1,200 cc. of blood were collected in the Branch Laboratory at Fort William from recovered poliomyelitis cases (residents of Port Arthur and Fort William). The blood was shipped by express to the Department Laboratory in Toronto for use in the preparation of convalescent serum. The donors were paid by the Department at the rate of one dollar per ten cc. of blood with a maximum of twenty dollars. My thanks are due to Dr. W. P. Hogarth (Fort William), for furnishing a list of recovered cases, also to Dr. White (M.O.H., Fort William), and to Dr. Laurie, (M.O.H., Port Arthur), for assistance and co-operation which made it possible to obtain such a generous amount of blood at a time when poliomyelitis convalescent serum was at a premium. Those who gave their blood also deserve great credit for supplying the only weapon available for preventing the development of paralysis.

The reporting of tuberculosis is still incomplete in the fact that more deaths than cases were reported during the year—eleven cases and nineteen deaths. Between July 2nd and December 31st three cases of tuberculosis were removed to sanatoria at the expense of the Department. There are no sanatoria in the Province of Ontario nearer than Gravenhurst and Weston, and patients from the western part of the district must undertake railway journeys of from 800 to 1,000 miles in order to reach either of these institutions.

The local board of health of the City of Fort William have lately equipped a small cottage annex at the municipal isolation hospital for the care of cases of tuberculosis. I believe the accommodation is limited to eight beds, and the local health authorities of Fort William are to be commended for their recognition of the need of special provision for the care of patients suffering from this disease.

A sanatorium for tuberculosis should be established without delay in District No. 7 to accommodate patients from the districts of Thunder Bay, Rainy River and Kenora. The sanatoria at Gravenhurst and Weston are filled to capacity according to recent advice which I have had from the Director

of the Division of Preventable Diseases, and there are waiting lists at each institution. It is becoming increasingly evident that the lack of adequate facilities in this district for the institutional care of patients suffering from tuberculosis is a matter for the serious consideration of both the provincial and the municipal authorities.

The reports from local boards of health indicate that no extensive outbreak of typhoid fever occurred in the district during the year. A total of twelve cases with no deaths were reported from seven municipalities. I have continued the practice (commenced in 1924) of communicating with the attending physician, whenever a Widal report (positive or negative) has been received from the laboratory, with a view to learning whether the case was clinically typhoid fever, and if so, his (the physician's) opinion as to the source of infection. The particulars obtained regarding definite or suspect cases were forwarded to the local M.O.H. Recent instructions are that typhoid investigation forms (prepared by the Director of the Division of Preventable Diseases) are to be sent to the local M.O.H. (or attending physician) whenever a positive Widal report is received from the laboratory or whenever a clinical case of typhoid fever is reported, even though the Widal be negative. The forms when completed are to be forwarded to the Deputy Minister of Health. This procedure is at present being carried out in District No. 7.

Seven cases of smallpox with no deaths were reported from Port Arthur during the early months of the year and one case was reported from the municipality of Shuniah adjoining Port Arthur.

One hundred and thirty-three cases of influenza with no deaths were also reported during the same period from five municipalities. Fortunately the district escaped the more fatal type of this disease.

Thirteen cases of acute lobar pneumonia were reported from five municipalities with thirteen deaths. As Port Arthur reported no cases and nine deaths and Keewatin reported no cases and one death, it is evident that the reports regarding this disease are as unsatisfactory as those of tuberculosis.

Twenty-one cases of scarlet fever with one death were reported from Sioux Lookout and sixty-nine cases with no deaths from Fort William. Sporadic cases were reported from six other municipalities, making a total of 103 cases and one death reported by local boards of health in the district.

Diphtheria cases were limited to eight with two deaths according to reports received. The two deaths were reported from Port Arthur.

During the year the total deaths reported in District No. 7 from whooping cough exceeded the total deaths reported from diphtheria and scarlet fever combined. One hundred and forty-five cases of whooping cough with four deaths were reported from five municipalities, eighty cases with one death being reported from Fort William and fifty-seven cases with three deaths being reported from Port Arthur. The serious nature of whooping cough as a cause of death in young children is not generally realized by the parents of children who contract this disease.

WEEKLY REPORTS AND MOTOR CAR LOGS

Routine weekly reports containing summaries of my work have been forwarded to the Deputy Minister of Health. To these reports have been attached schedules indicating the motor car mileage and expenses in connection with same.

OTHER DEPARTMENTAL ACTIVITIES

During the period August 22nd to 26th Mr. G. M. Galimbert, Assistant Engineer, accompanied by Mr. A. L. Smith, Provincial Sanitary Inspector, completed a sanitary survey of several summer homes and camps in territory without municipal organization on the Lake of the Woods above the Kenora municipal waterworks intake. Mr. Galimbert and Mr. Smith also inspected four summer pay camps in the same area.

Mr. W. C. Millar, Provincial Sanitary Inspector, was promoted to the position of Chief Sanitary Inspector, replacing Mr. Alex. White, who resigned to become Chief Sanitary Inspector for the Canadian National Railways. Mr. Millar left the district in August, going to Toronto to assume his new duties. I regretted very much the termination of the years of association with Mr. Millar in public health work in District No. 7, but it was a pleasure to know that his ability as an Inspector has been recognized by his appointment as Chief of the Sanitary Inspectors in the employ of the Department. Mr. White's assumption of his new duties also meant the termination of old associations, but the Canadian National Railways, by appointing Mr. White as their Chief Sanitary Inspector, have paid a tribute to the high degree of efficiency attained by the Sanitary Inspection Division of which Mr. White was for so many years the energetic and capable Chief Inspector.

The district over which Mr. Millar had charge previous to his promotion was divided between Mr. A. L. Smith and Mr. A. O'Hara, each of whom took over his respective duties during the summer months. I have found Mr. Smith and Mr. O'Hara at all times anxious to afford me all possible assistance in the carrying on of public health activities in the territory without municipal organization, and their co-operation has been appreciated.

Miss M. I. Walker, Public Health Nurse, carried on her duties during the latter half of the year in the area between Fort Frances and Emo. Miss Walker was instrumental in bringing to my attention two of the three tuberculous patients who were removed to sanatoria at the Department's expense.

The routine reports, correspondence and other office routine inseparable from the work of the district officer, are increasing at an alarming rate, and it is largely due to the efficient office stenographer that this work is being carried on with a reasonable degree of regularity.

DEATH OF DR. N. O. THOMAS

Dr. N. O. Thomas, the late Director of the Branch Laboratory in Fort William, died early in the month of October. Dr. Thomas was a most painstaking and capable pathologist and bacteriologist, and it was a privilege to have been associated with him for so many years in the office at Fort William. His sterling qualities will never be forgotten by the Provincial Public Health staff, who worked together during the past ten years at the head of the lakes.

Mr. W. J. Thompson, the capable senior technician, assisted by Mr. Stanley Whittaker, has carried on the work of the laboratory during the months of October, November and December, pending the arrival of Dr. James Bell, recently appointed director of the laboratory in Fort William.

SUPERVISION OF DISTRICT, JANUARY TO JUNE, INCLUSIVE

Mr. W. C. Millar, Provincial Sanitary Inspector, carried on the routine supervision of District No. 7 during the period of my leave of absence and Mr

Millar discharged this additional responsibility to the entire satisfaction of the Department. Dr. C. N. Laurie, M.O.H., Port Arthur, was called upon by Mr. Millar for advice of a medical nature when required.

RECOMMENDATIONS

(1) That present legislation be amended so as to give the Ontario Department of Health statutory authority to exercise sanitary control over milk supplies, similar to the present control over water supplies.

(2) That the attention of the Legislature be directed to the fact that there is no sanatorium in the Province of Ontario nearer to District No. 7 than the institutions at Gravenhurst and Weston; that the accommodation at the above sanatoria is inadequate to meet the requirements of this district, and that provincial and municipal appropriations should be made available at an early date for the construction and operation of a sanatorium in District No. 7 for incipient and advanced cases of tuberculosis.

(3) That the supervision of motor tourist camps and highway refreshment booths be placed on a statutory basis so that their continued operation will be dependent upon compliance with the requirements of the Ontario Department of Health.

(4) That local medical officers of health be appointed for the agricultural townships without municipal organization open for settlement in District No. 7, and that provision be made by the Department for their remuneration for services as rendered.

(5) That provision be made by the Department for the remuneration of practising physicians who may be requested by school boards or others in territory without municipal organization to perform vaccination against smallpox or toxoid immunization against diphtheria.

DISTRICT No. 8

H. W. JOHNSTON, D.O.H.

I have the honour to present this annual report for District No. 8 of the Department of Health of Ontario for the year 1929.

More than usual attention has been given to the problem of the control of communicable disease. With the close of each year and the preparation of annual reports, one has been on each occasion reminded that the effort to reduce the number of certain known communicable diseases, though a great deal of time has been devoted to that phase of public health, yet no great improvement has been noted over a period of ten years during which this district has been organized. Special attention has been given to checking the returns made by municipalities and by physicians in an endeavour to secure more complete and earlier information regarding the incidence of reportable diseases. Some success has been secured in this regard, as may be drawn from a comparison of figures for the years 1928 and 1929. It is estimated that with the exception of influenza, which was present in the early part of 1929, holding over from 1928, that the actual incidence of communicable disease was not greater than

in the former year. The figures, however, as shown for 1929, are considerably larger for the latter year, due largely to more complete records:—

	1928	1929
Cerebro-Spinal Meningitis.....	1	3
Chickenpox.....	39	43
Diphtheria.....	54	82
Gonorrhoea.....	10	6
Influenza.....	23	109
Measles.....	1	152
Mumps.....	215	68
Pneumonia.....	13	22
Anterior Poliomyelitis.....	1	1
Scarlet Fever.....	62	86
Smallpox.....	2	10
Syphilis.....	2	14
Rabies.....	1	0
Tuberculosis.....	6	41
Typhoid Fever.....	3	19
Whooping Cough.....	33	3
Septic Sore Throat.....	..	7

A number of interesting conclusions might be drawn from comparison between the figures as given and what one generally finds to be present on the field.

It might be presumed that the regulations regarding the reporting of venereal diseases are, for all practical purposes, ignored except as they may be noted in routine work of clinics or public institutions.

Tuberculosis has not previously been well reported by physicians and local boards of health. It was found during 1929, that by checking carefully, laboratory reports from positive examinations of sputum from new cases, that the number was increased from six in 1928 to forty-one in 1929. This increase it may be safely concluded was not on account of a greater number of cases of diagnosis, but the difference was due to the tabulation of all available information.

Diphtheria also shows a decided increase in 1929. This is explained not so much by more complete reporting as by the fact that in connection with a number of fairly mild cases in and around Sault Ste. Marie, a large number of school children and contacts were examined for carriers and positive laboratory reports, without clinical symptoms, were classed as cases even though a virulence test was not secured.

The influenza incidence in the district during the early part of the year, was probably less than in more thickly populated parts of the province. Cases which received medical attention were fairly well reported, but large groups in areas where medical attention was not easily available, would not have a physician's services and these cases would not be included even in comparatively incomplete reports. The service rendered by the Department in sending a physician to the isolated community of Killarney, during the month of January, was thoroughly appreciated in the area served during the period when, owing to winter conditions, outside service was not available.

Isolated cases of typhoid fever in the northern part of the district along the line of the C.N.R., were again found during the year. The cases were generally found to be due to poor sanitary conditions in homes of settlers along the line of the railway.

During the year attention was given to the possible existence of contagious abortion in an endeavour to ascertain if there might be some connection between milk supplies and a few typical cases of typhoid, for which no definite source could be located. Laboratory examination of the blood sent for Widal reaction

did not give positive reactions for undulant fever, and it could not be definitely established that the disease was present in the herd suspected. The very limited amount of material available and the cessation of clinical cases after midsummer, prevented a more thorough study of the situation in Central Algoma.

Preliminary plans were made for a programme of co-operation with the Department of Agriculture in the district of Manitoulin in order to arouse interest in the value of tubercular testing of cattle. Chest clinics which have been conducted at several points have indicated that tuberculosis is more prevalent than had been suspected among the population—probably not more prevalent than an average rural area, but more than might seem unavoidable under such generally favourable conditions. The area is well suited geographically to be made a restricted area, and it is expected that further information may arouse local interest to apply for the test to be made by the Federal Department.

Outbreaks of scarlet fever and diphtheria in a number of rural sections in Algoma has offered an opportunity for the introduction of the administration of active immunization. In the city of Sault Ste. Marie, following a number of cases of diphtheria, the M.O.H. with the co-operation of the public school officials, instituted a campaign for administration of toxoid. Figures are not immediately available as to the percentage of pupils treated but the response was satisfactory, the large majority of children up to ten years of age accepting the treatment. The usual difficulty of securing the pre-school children for treatment was evident even though opportunity was offered for the parents to bring them to the schools when the older children were being treated.

Supervision of tourist camps in the district during July indicated that the type of camp and the sanitary conditions are becoming more satisfactory from year to year. The undesirable camp and booth are as a rule going out of business after a trial of about one season. The ones which remain from year to year add to equipment and upkeep as the growth of the business permits. The considerably increased traffic in New Ontario last year was satisfactorily taken care of, and the evident attention to sanitation given by the Department is appreciated by the tourist who is frequently doubtful regarding the type of accommodation that may be available "in the North."

During the year routine sanitary inspections have been made of public buildings and hospitals in Hearst, Thessalon, Sault Ste. Marie, Chapleau, Richard's Landing and Gore Bay. In general, these public buildings are well maintained, and where minor unsatisfactory conditions are found it is usually only required to suggest the required changes to the local officials in charge.

Special attention has been required in investigating unsatisfactory sanitary conditions in connection with garbage disposal at Little Current, Iron Bridge, Walford and Hearst. During the early spring some difficulty was encountered in connection with garbage disposal for the city of Sault Ste. Marie. Owing to a particularly prolonged season of storms and deep snow the garbage transportation facilities became blocked, and later the capacity of the incinerator overtaxed. The conditions were overcome before serious conditions resulted.

Regular public health nursing services have been continued throughout the district in the rural and smaller town centres. Sudbury district is covered from a headquarters in the town of Sudbury and Algoma district from Thessalon. The Island of Manitoulin has had only a brief service during the year, when in August Miss Lunn was employed in organizing the work in preparation for a dental service clinic on the west end of the island. During the summer on the

request of municipal officials and representative members of the public and separate school boards, assistance was secured from the Department of Health in establishing a local public health nursing service. Chapleau is one of the smaller communities undertaking such a service. Educational facilities in Chapleau are of a particularly high order and with the added advantage of a combined nursing service, a very complete organization is provided.

As indicated above, the dental service that is being provided by the Department for school sections in isolated districts is providing an urgent need that could not be well met in another way. The service this year was made available in parts of Sudbury, Algoma and Manitoulin districts.

During the year two new medical officers of health have been appointed for municipalities in District No. 8. Dr. M. C. Cain was appointed to fill a vacancy due to the resignation of Dr. A. Quackenbush at Hearst and Dr. A. N. Morphy replacing Dr. Webb who removed from St. Joseph's Island.

Installation of an up-to-date water supply and sewerage system has been completed in the municipality of Blind River. A deep well system as the source of supply is providing an excellent quality of untreated water.

The problems to be solved from a public health standpoint in the district, as usual have been closely associated with social welfare and medical problems. An opportunity to co-operate with the various official and voluntary organizations engaged in the various branches, doing associated types of work, has resulted in finding solutions for many problems where one particular service might not have an opportunity to carry the matter to a satisfactory termination.

The opportunity offered by the Department for a year of special study in public health is being very thoroughly appreciated. It is felt that the year's work will be a valuable asset in future work with the Department.

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THIRD REPORT
OF THE
LIQUOR CONTROL BOARD
OF
ONTARIO

From November 1st, 1928 to October 31st, 1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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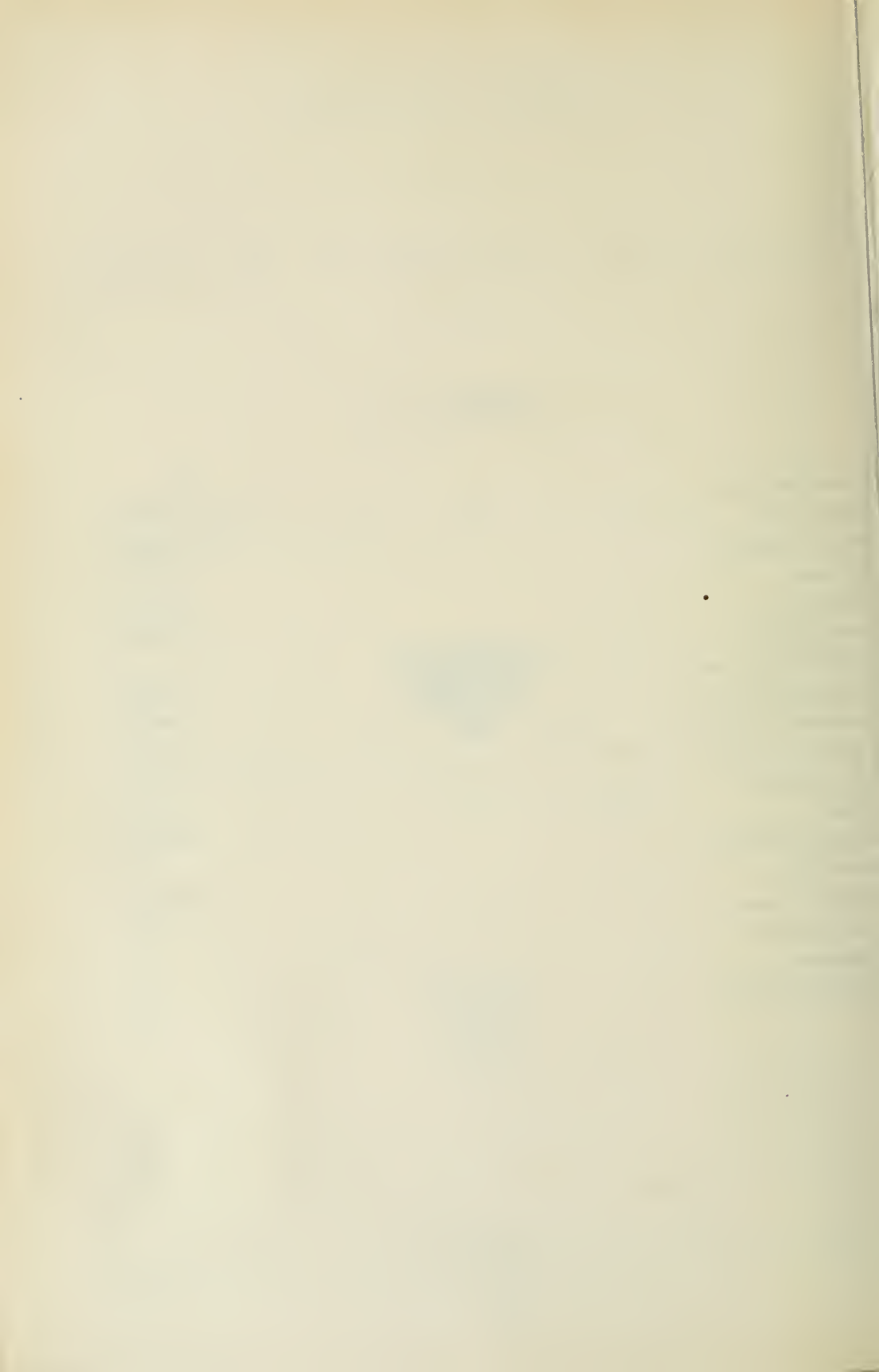
1912

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Liquor Control Board of Ontario

110 UNIVERSITY AVE., TORONTO 2,
February 3rd, 1930.

TO COLONEL THE HONOURABLE W. H. PRICE, K.C.,
Attorney-General, Province of Ontario,
Parliament Buildings, Toronto 5, Ontario

SIR:—

The Liquor Control Board of Ontario has the honour to submit herewith its third report for the year ending 31st of October, 1929.

FINANCIAL STATEMENT

Forwarded herewith is the balance sheet and profit and loss account prepared and certified to by Messrs. Clarkson, Gordon, Dilworth, Guilfoyle and Nash, who conduct a current and extensive audit of all the Board's activities.

On referring to the balance sheet, it will be noted that the amount of fixed assets was \$227,654.22, this amount represents the cost of land and buildings situated at 154 Wellington Street West, Toronto, and Fort William, less depreciation on buildings. Included also is the value of fixtures and alterations in rented premises, furniture and equipment less the amount written off.

Current assets amount to \$5,275,098.60, being composed of the following items:

Cash on hand and in banks.....	\$2,279,704 19
Accounts receivable made up of: Hospital sales, 5 per cent. commission on direct brewery and brewery warehouse sales, duty recoverable items due us from Customs Department, freight claims, fines, etc.....	77,358 80
Inventories of liquors and supplies.....	2,877,698 63
Prepaid insurance.....	40,336 98

The liabilities are shown as \$2,738,455.65. This amount is composed of the following items:

For liquors and supplies.....	\$2,653,368 03
Miscellaneous charges, accrued, etc..... (The principal item being unearned License Fees for 1930 paid this year \$44,975.)	72,825 11
Due Provincial Treasurer..... (For permit sales and confiscated stock).	12,262 51

It will be observed that a surplus is shown of \$2,764,297.17 which includes the balance carried forward from last year of \$607,848.57 and the balance of net profits for the fiscal year after paying the Provincial Treasurer the sum of \$7,505,000.00. This surplus is represented by our assets, the amount thereof being the excess of assets over liabilities. It does not, of course, take into consideration contingent liabilities which amount to \$5,195,598.57. These contingent liabilities, while representing matters that have to be set up, are nevertheless not a fair charge on the operations of the Board, for the year that just closed.

The profit and loss account shows sales of \$55,360,569.81. These sales include sales made through the Liquor Control Board stores and warehouses and the sales made from breweries and brewery warehouses. The amount sold by the breweries and brewery warehouses being \$17,733,790.60 as against \$37,626,779.21, the amount sold by the Board.

The statement shows a gross trading profit of \$11,566,658.98 and a net trading profit of \$8,751,680.28. This sum, together with other revenue, which amounted to \$909,768.32, resulted in a total profit of \$9,661,448.60, which is carried to the balance sheet.

For purposes of comparison, the percentages that the cost of stock sold, miscellaneous earnings and expenses and other revenue, bear to the total of gross sales are given for the years 1928 and 1929.

Besides the balance sheet and profit and loss account, statements showing summary of sales and the Board's expenses of administration and operation for the twelve months are also attached. Again for the purpose of comparison, the individual percentage which all these expenses bear to the total sales is given for both periods on the expense statement.

In addition, all Liquor Board stores, brewery warehouses, breweries and wineries privileged to sell alcoholic beverages in Ontario as of October 31st, 1929, are set forth on Schedule III attached and a classification of permit and license sales appears on Schedule IV.

STORES

Six new stores were opened during the year. They were:

Store No.	Location	Date of Opening
18—	Midland Avenue and Kingston Road.....	Scarboro Bluffs..... July 18th, 1929
" 119—	Main Street.....	Merrickville..... Nov. 15th, 1928
" 120—	.....	Pelee Island..... Nov. 16th, 1928
" 121—	1008 Wellington Street West.....	Ottawa..... June 18th, 1929
" 122—	.....	Hearst..... July 29th, 1929
" 123—	Corner Main and Collins Streets.....	Laucaster..... July 6th, 1929

One Mail Order Store closed, No. 41a, Fort William, on February 28th, 1929, having been transferred to Store No. 41.

The total number of stores in operation at the close of the year was 122.

BREWERY WAREHOUSES

Five Brewery Warehouses were opened during the year, as follows:

	Location	Date of Opening
221 Sherman Avenue.....	North Hamilton.....	Nov. 5th, 1928
30 Wyandotte Street.....	Windsor.....	Nov. 24th, 1928
Government Road.....	Kapuskasing.....	Nov. 24th, 1928
Broad and Wellington Streets.....	Ottawa.....	Nov. 26th, 1928
304 Victoria Avenue.....	Fort William.....	Feb. 1st, 1929

The total number of brewery warehouses in operation at the end of the year was 105. It should be noted that there are thirty-six breweries producing and selling beer in Ontario and that in addition to this, four other Canadian breweries, outside of the Province, also are represented in the brewery warehouses.

WINE PLANTS

The number of plants making native wine and in operation is fifty-two, all of which have been properly licensed by the Board.

GENERAL

Evils resulting from the abuse of liquor have been ever present. The sin of drunkenness is still with us and probably will remain with the host of other sins and crimes that scourge humanity just so long as human nature is what it is and until that Utopian day arrives when police, prisons and criminal codes have no justification for a continual existence.

All efforts, however, to reduce drunkenness as much as possible ought to be made. The co-operation of all social workers is earnestly desired by the Board—all can help in making it clear that the abuse of liquor is looked on by the people as a degrading thing—that strict sobriety and clean living is not only essential to business success, but also worth while citizenship.

So much has been said and is from time to time said with perfectly good faith which cannot be supported by the facts, that the Board is of the opinion that a full and frank statement of the problems that confront them and the actual facts as to the consumption of liquor to the extent possible should be made.

The Ontario Temperance Act has been twice rejected by the citizens of Ontario. Not as the Board see it; that if enforceable it was not an excellent law; but because to the common knowledge of the people the abuse of liquor continued and grew—that bootlegging became in effect an established business creating new millionaires and that a use of poisonous substitutes had been created and was growing.

The law was not enforceable simply owing to the fact that a very large number of the people considered it a grave infringement of personal rights and liberties and not only broke its provisions but even took pleasure and satisfaction in so doing.

The law, in view of the state of public opinion was unenforceable. Government Control would in the same way fail if made unreasonable and too drastic and inquisitorial and if accompanied with petty and pin-pricking prosecutions. But, on the other hand, while Government Control has already transferred the great profits of illegal business to public uses and has eliminated that great source of corruption and lawlessness—the big bootlegger—full success will only be attained when all illegal practices and all abuses resulting from the traffic are reduced to the fullest extent possible. The Board is convinced that such policies and administration as tend to this end ought to carry that general support and approval of the public necessary for the enforcement of all sumptuary laws. The bootlegger to-day ought to be regarded by all as a public enemy. He is. All are interested in cutting down drunkenness and the poverty resulting from it. The instructions to vendors contain the following stipulations:

“Liquor must not be sold to those who abuse it and sales should not be “made so as to render possible a continuance of drunkenness.”

“Liquor must not be sold to those who from the amount of their purchases “and from their standing and circumstances are likely to be supplying boot-
“leggers.”

“Liquor must not be sold when the financial standing of the purchaser is “such that the sales must be followed by a diminution of the comforts of life “in the family.”

The stores are the property of the people. All are or ought to be interested in their proper administration and particulars of breaches of the above instructions, if given the Board, will be very welcome, and the names of those helping in obtaining better social conditions kept, when desired, strictly confidential.

LIQUOR TRAFFIC IN CANADA

From time to time the dollar value of liquor sales is compared with those of previous years and the attempt made to show excessive consumption and drunkenness. While drunkenness can, of course, be found, Ontario is not a drunken Province. Its people are sober and industrious. Owing to changes in taxation irrespective altogether of the decreased purchasing power of the dollar, comparisons based on the money value give no fair or honest conclusion.

A Bulletin on "the Liquor Traffic in Canada" was issued by the Department of Trade and Commerce last Summer. The Bulletin taking into consideration the legal transactions only and giving no consideration to illegal traffic and the facts established in the Customs investigation, as prepared shows a large increase in consumption under Government Control generally, and, in part, reads:—

"Dominion Government revenues (see Table 4) reflect partly the increased consumption and partly increased taxes, chiefly Excise War Taxes, which in 1928 amounted to nearly six and one-half million dollars, the totals even with these allowances show a very decided upward trend, from the low figures of eight and one-half millions in 1919 the Dominion Revenue from Excise and Customs Duties and Taxes on alcoholic beverages increased to forty-nine and three-quarter millions in 1928."

The Bulletin's reader is led to conclude that apart from increased taxes, chiefly Excise War Taxes of six and one-half million dollars, the great growth from 1919 to 1928, amounting to over forty-one million dollars, was owing to the increased consumption of alcoholic beverages. Such a conclusion is indefensibly erroneous.

No reference whatever is made to the great increases that have been made in the Customs and Excise rates and which amount to a multiple of the Excise War Taxes the Bulletin refers to. In order that proper consideration can be given to the liquor problem the exact facts must be known as far as possible.

Table No. 4 of the Bulletin commences with the fiscal year ending March 31st, 1913. The rates of Duty then in effect were: Customs \$2.40 per gallon of alcoholic content, and Excise \$1.90.

In August 1914, the Customs Duty was increased from \$2.40 to \$3.00, and the Excise Duty from \$1.90 to \$2.40.

In May, 1920, an Excise Tax of \$2.00 per gallon was added to the Customs Duty of \$3.00, making a total tax of \$5.00, and the Excise Duty was increased to \$4.40 per gallon.

In May, 1921, the Excise tax placed on imported spirits, of \$2.00, was abolished, but the Customs duty was increased to \$10.00, and the Excise duty increased to \$9.00.

The Bulletin accounts for the increase from eight and one-half million dollars to forty-nine and three-quarter millions in 1928, by increase in consumption less increased taxes chiefly Excise War Taxes of nearly six and one-half million dollars. The truth is that the increased Customs and Excise duties are by far the greatest factor.

This same table 4, of the Bulletin, shows the largest liquor revenue under the old basis of taxation to be that of 1913, amounting to \$18,699,833, and made up entirely of Excise and Customs duties.

The statement of the Customs-Excise Department shows the gallonage of imported spirits of that year to be 3,529,469 gallons and Excise gallonage 4,999,937. At the present Customs and Excise rates these gallonages would have yielded a Customs revenue of \$35,294,690, and Excise of \$44,999,433, a total

of \$80,294,123. This example illustrates plainly the great increase in revenue brought about by taxes, entirely ignored in the Bulletin.

Again, so there may be no doubt as to the falsity of the conclusions of the Bulletin, its Table 4 gives the Dominion revenue from liquor, for 1927, as \$35,857,122, of which only \$5,316,583 consists of Excise War Taxes,—a big increase from the eight and one-half millions of 1919. But, Table No. 1 of the Bulletin itself shows the consumption of spirits from which the great bulk of the revenue is derived, to have dropped from 3,353,141 gallons in 1919 to 2,894,322 gallons in 1927. Here then is a very large increase in revenue accompanied with a reduction in consumption of 458,819 gallons shown by the authors of the Bulletin themselves. The great increase was entirely owing to an increased taxation, to which no reference was made, despite reduction in consumption.

It is abundantly clear that mere increases in revenues derived from the liquor traffic afford of themselves no necessary evidence of increased consumption.

The Bulletin gives the total Dominion revenue from liquor in 1928, as \$49,805,291. During the last session of Parliament, the Honourable, the Minister of National Revenue, stated this revenue amounted to \$54,109,011, without taking into consideration the Sales Tax paid on the products but including the tax on malt which was chiefly used for brewing beer. The Sales tax may be reasonably estimated at \$3,000,000.

The Dominion receipts from alcohol and alcoholic liquors made up on the same basis, amount, for the year ending March 31st, 1929, to \$59,595,573.69, an increase of \$5,486,562.69.

While, as the Board is advised, this is the correct total received by the Dominion, proper accuracy demands that the sum of Excise duties charged on non-potable spirits and amounting to \$1,164,618.00 should be deducted, making a total of \$58,430,955.69, apart from the Sales Tax.

It is but fair to say that the Bulletin was not the work of the capable regular officials of the Dominion Bureau of Statistics, but was compiled by temporary employees in the Bureau during the summer season.

Table No. 1 of the Bulletin collects Dominion Statistics as to population and consumption of alcoholic beverages. Owing to the fact that Government statistics do not and cannot cover smuggled or illegally manufactured liquor (illegal businesses that were of great proportions, as shown by the Customs Inquiry), only relative importance can be ascribed to them. The day of the big bootlegger has now passed in Ontario and, as the Board has reason to believe, in most other Provinces, and statistics will become and are becoming of real value.

Table No. 1 shows a consumption of spirits per capita of 1.136 gallons in 1913 and .425 gallons in 1928; a real betterment; all the more great when the large tourist traffic of to-day is considered.

FACTORS INFLUENCING SALE

It is interesting to note the changes in the per capita consumption irrespective of changes in the law and Provincial prohibition or sale. For example, during the prohibition period and before the Provinces put Government sale into effect, the table shows that:

The per capita consumption of spirits in Canada in 1917 was	.703	gallons
“ “ “ “ “ “ “ “ “	1918	“.682 “
“ “ “ “ “ “ “ “ “	1919	“.395 “
“ “ “ “ “ “ “ “ “	1920	“.608 “
“ “ “ “ “ “ “ “ “	1921	“.723 “

The years are the Dominion fiscal year ending March 31st, and therefore for the most part show the activities of the previous year. During 1921, the Quebec and British Columbia Governments' sales were put into full operation and their activities shown in the fiscal year 1922. The table shows that the per capita consumption of spirits of that year (1922) was .231 gallons and for 1923 but .204 gallons. From this it might be claimed that prohibition had almost doubled the sale of .395 gallons in 1919 which increased to .608 gallons in 1920 and to .723 gallons in 1921, in but two years and that the partial introduction of Government sale, in but two years, had cut the consumption down from .723 gallons to .204 gallons or less than a third.

There would be, of course, nothing in either claim. It is well known that the country suffered a short severe economic depression immediately after the war, which is evidenced by a decrease in consumption in 1919, the consumption of 1918 being almost cut in two. This period of depression was quickly followed by post-war inflation and expansion. Consumption immediately rises to .608 gallons in 1920 and .723 gallons in 1921. The period of post-war depression commenced in 1921 and continued to 1927. Diminished consumption in 1922, and subsequent years resulted. Consumption increased in 1927 and in 1928, a year of admitted prosperity, rose to .425 gallons per capita.

The results plainly show that economic conditions, rather than laws, influence the gross sale of liquor. The financial year, 1929, was again more prosperous than 1928. The final figures for the year have not yet been issued by the Department of Statistics, but from the data available, it is believed that the consumption has increased to .445 gallons per capita.

The Bulletin, had it been the work of the regular statisticians of the Bureau of Statistics, desirous as they would be of giving fair and complete information, would have pointed out that in considering the per capita figures consideration must be given the great increase in the tourist business. The statistics of the Bureau show that more than 3,600,000 tourist automobiles entered Canada in 1928, and that the tourists by automobile alone are estimated to have spent \$167,384,000.00 in Canada. The total expenditure of all tourists was estimated at \$250,501,000.00. As is well known, the tourist business is the growth of recent years. The number of tourists in 1928 was a multiple of those of 1919.

The purchase of spirits is also much curtailed when their cost is high. Beyond all doubt consumption increases with low prices, and decreases with high prices. The fact that whiskey, which cost 75 cents in 1913, sold for \$2.75 in 1928, has much and very much to do with a consumption per capita of only .425 gallons in 1928, as against a consumption of 1.136 gallons in 1913.

Drunkenness has decreased in the United Kingdom. Hours of sale have been shortened. As of January 1st, 1928, there were in England and Wales alone 78,803 licensed premises for sale for consumption on or off the premises. 22,189 premises licensed for sale for consumption off the premises and 12,775 registered clubs. The total number of places where liquor could be obtained was 113,767. Liquor is freely sold. It is not at all hard to get by the glass, or otherwise, if the would-be purchaser has the price. But, prices there have very largely increased. The taxes alone are no less than 101 shillings and six pence, or \$24.66 on a case of whiskey. While propaganda has been carried on against drunkenness, the best informed workers and observers are generally of the opinion that the high cost of spirits coupled with industrial conditions and unemployment largely contribute to the decreased consumption.

MODERATION—ABSTINENCE

While this is true, the great necessity at all times is a general acceptance by the people that strict moderation, if not abstinence, is necessary. All that will tend to bring about this general conviction ought to be done. Probably a very large reason for the failure of prohibition lay in the fact that with the enactment of prohibition temperance societies largely thought the battle was over. Apparent activities were all directed to stricter and ever stricter enforcement of the law. But, while free people may be led along moral paths, they cannot be successfully driven. This applies just as much to the abuse of liquor as to any other moral question. The blue ribbons, so often seen before prohibition, have disappeared. All educational campaigns, instituted by those societies interested in temperance and the betterment of social conditions, will, if persisted in and generally followed up, prove most helpful. Those interested in the work of reducing the abuses of liquor can obtain much assistance from the Board. Apart from the general appeal of the churches and societies for temperance, the work of helping those subject to the influence of liquor consists in the handling of individuals and solving the difficulties of the family.

The Permit Supervision Branch of the Board is always busily engaged on this work. Under the Liquor Control Act, for the first time, the social worker dealing with hard cases can obtain Government support and backing—Permits can be cancelled—permittees disciplined—prosecutions, when necessary, undertaken by officers of the Board accustomed to dealing with the many-sided problems the question presents. The Board will be always ready to co-operate. Many homes have already been helped, but information as to where help is required is the first requisite.

Permit supervision means much more than the taking of steps looking to the cancellation of permits. It often involves a sympathetic study of the individual and the family. Mere cancellation of permits in some cases does no good, but only adds to the market of the illegal operator, and, sometimes, leads to the use of dangerous substitutes. In the many difficult cases dealt with by the Chief of the Permit Department, the effort is always made to carry the judgment of the "patient." To convince that all that is said or done is solely in his interest and that of his family. Once carry that judgment and create that conviction, further troubles and excesses may be avoided. Often a return of the permit with a restriction self-imposed by the permittee himself is found to work well. In other cases, it has been found that the taking away of the permit from the husband, or son, and giving it to the wife, or mother, works well, and has resulted in restoring proper conditions in the home. The problem is always a personal one and each difficult case has to be studied in the light of its own peculiar circumstances. In many cases, the Department has found that a return of the permit with a limitation of purchases, governed by the size of the family, and its purchasing power, solves the problem. The problem being personal, the effectiveness of control grows with the ever-increasing knowledge the Vendors have of their customers and of their habits and circumstances. A good Vendor, properly understanding and conscientiously enforcing moderation and control, is made the more useful to the Province by each day's service.

The Board has given full consideration to the question of regional purchases. That question has been dealt with by a circular, addressed to the Vendors and Permit Issuers, a portion of which, dealing with this particular feature, reads as follows:

"Consideration has been given to the adoption of so-called regional purchases. The regional permit, in effect, would mean that it would only be good at the store nearest to the domicile of the permit-holder. The advantages of such an arrangement would be that the one Vendor would know all about all the purchases of those to whom he sold liquor, and so be, therefore, in a better position to exercise proper control.

"The disadvantages of such a system lie in the fact that many travel from one point in the Province to another, either on business or for pleasure, and that such a ruling would inevitably result in the carriage of much more liquor through the Province from one residence to another than is desirable. It is desirable that there should be just as little liquor in carriage as possible, and especially in automobiles.

"As the position stands to-day, a man in Toronto, having a summer residence in Muskoka, is not obliged to take with him in his automobile any liquor for his stay at his summer home, where he has an equal right to have liquor as he has in his city residence. Instead of carrying the liquor with him, he may now purchase liquor at the Gravenhurst or Huntsville stores, which are at the gateways of the lakes district.

"But over and above all this, the Liquor Control Act ought to be administered without creating any unnecessary or vexatious difficulties for the public. The public have the legal right under the Act to purchase liquor, and regulations ought not to be so drawn as to multiply inconveniences on the one hand and on the other invitations for infractions of the law.

"SMALL PERCENTAGE OF IMMODERATE PERMITS

"419,797 resident permits have been issued. Out of this great number, only a very small percentage make any real trouble. By this I mean, drink to excess, purchase beyond their means, or use permits to aid and abet bootlegging. Besides this total, 106,987 non-resident permits have been issued. Many of these are to automobilists touring through the country and if in their case their permits were made regional, it would only mean that an unfortunately large amount of liquor would be carried in their automobiles.

"While the percentage of irregularities which occur in the non-resident permit-holders would appear to be greater than those of the resident permittees, nevertheless, here again the percentage of those offending the law or guilty of excess is but small compared with the total.

"It is felt unnecessary to limit the rights and privileges, which have not been abused, of the great majority, merely for the purpose of employing an added check on those who may offend.

"On the other hand, there would appear to be absolutely *no reason why the regional principle should not be adopted in the case of those who really require the closest supervision* of a Vendor knowing all about them and their circumstances.

"STAMPING RESTRICTION TO ONE STORE

"It has, therefore, been decided, pursuant to the foregoing, *to stamp all permits under suspicion*, but as yet uncanceled, so as *to make such permits good only in the store convenient to the residence of the permittee* and where the permittee is known. In all such cases, vendors must take a very special interest in the affairs of the permittee, become responsible for his purchases of liquors, and

see that the existing instructions are carried out to the very letter. Those instructions are:

“(a) Liquor must not be sold to those who abuse it, and sales should not be made so as to render possible a continuance of drunkenness.

“(b) Liquor must not be sold to those who from the amount of their purchases and from their standing and circumstances are likely to be supplying bootleggers.

“(c) Liquor must not be sold when the financial standing of the purchaser is such that the sales must be followed by a diminution of the comforts of life in the family.”

“Each Vendor will be furnished with a rubber stamp reading thus:

“PURCHASES ARE HENCEFORTH CONFINED ONLY TO STORE NO. —”

“This is to be stamped by the Vendor on the line following the last entry, when such limitation is, in the opinion of the Vendor, necessary in order that the Board’s instructions, as contained in paragraphs (a), (b), and (c), may be fully carried out.

“The above stamp is to be preceded by date as usual, and at the end of the line the store number and the Vendor’s initials, placed by himself.

“This stamp should be repeated at the top of the next two or three right hand pages, in order to ensure that other Vendors will turn the permittee back to the Vendor who has made the restriction.

“The Vendor so acting will have the permittee under his sole control and will be responsible for the reasonable use of the permit.

“In cases where the Vendor is in doubt and difficulty as to the right course of action to be adopted, he shall forward the permit to the Director of Permits with his report thereon, with such particulars as it is possible to obtain as to the character and standing of the permittee.”

LIGHT BEVERAGE WINES

Of all beverages, light wines and beer are the least intoxicating of alcoholic beverages. Beyond all question, if those who use liquor could be induced to drink light wines or beers in place of hard liquors, it would be a great improvement. The drinking on the continent of Europe of light beers, and of Sauternes, Clarets, Burgundies and other light wines, in the place of whiskies, is the real reason why so little drunkenness is observed in the wine and beer drinking countries, as although the use of wine and beer is very prevalent, their comparative lightness, as a rule, never induces drunkenness.

It is a slow and difficult thing to change the habits of a people, and little light wine is used in Ontario. In order, however, to encourage their use in preference to stronger liquors, the Board has reduced their prices to the public. Perhaps, one of the best features in connection with the use of light beverage wines is that they are used as a rule at meals, and not between meals. If spirituous liquor is drunk at all, the use in moderation at meal time only is the least productive of any abuse.

Reduction in prices is marked. For example, a quart bottle of Medoc, formerly at 70 cents, has been reduced to 55 cents; a reduction of 21 per cent. St. Julien, from 85 cents to 65 cents; a reduction of 23 per cent. Graves, from 80 cents to 60 cents, or 25 per cent. Sauternes, from \$1.00 to 80 cents, or 20 per cent. Rosechatel, from \$1.25 to \$1.00, or 20 per cent. Beaune, from \$1.15

to 95 cents, or 18 per cent. Chambertin, from \$1.90 to \$1.55 or 23 per cent. Macon, from 80 cents to 65 cents, or 18 per cent.

The quality of these light wines has been improved and the prices at which they can be now obtained in Ontario compare favorably with world prices.

Statements have been made as to the large number of places where liquor may be obtained and, on the other hand, complaints have been made that public convenience demands more stores and that, in particular, that the facilities for purchasing beer be increased. In 1916, Ontario's population was given as 2,722,804 and, for 1929, as 3,271,300. The following statement gives the facilities for the purchase of liquor then, and now:

Liquor License Act, 1916		Liquor Control Act, 1929	
Bars (Liquor).....	1,251	Stores.....	122
Beer and Wine.....	7	Breweries.....	36
Liquor Shops.....	211	Brewery Warehouses Selling.....	104
Wholesale.....	28	Wineries.....	52
Clubs.....	64	(No sale by the glass)	
Wineries, about.....	25		
	1,586		314

Applications for new stores have been largely refused by the Board. In its option, new stores ought to, as much as possible, be confined to points where they may be found necessary to check petty bootlegging and to better social conditions.

Further stores may be also necessary in large centres where the existing stores are overcrowded. Waiting queues outside liquor shops must be avoided if possible. Again, a crowded store with a lot of people waiting in line makes a proper scrutiny of the Permit and of the would-be purchaser increasingly difficult. There are always some desirous of avoiding proper scrutiny that deliberately choose a crowded hour in the hope of having their purchase the more easily passed in the rush.

In the interest of proper control, some stores must be enlarged or new ones opened. The operating ratio will be, of necessity, increased, but it is felt that the extra money will be well expended in order to insure better permit endorsement.

Much has already been done in this direction—many stores have been re-arranged and the accommodation enlarged—but the work is progressive and will be continued. Some twenty-one stores have been so treated during the past year.

SALES

The year past was one of exceptional prosperity. The sales have increased, amounting, as they do, to \$55,360,569.81. For the purposes of comparison the following table is submitted:—

	1928	1929	Increase	Percentage
Domestic Spirits.....	\$10,915,969 75	\$12,043,271 33	\$1,127,301 58	10.3
Imported Spirits.....	18,977,367 25	20,225,232 58	1,247,865 33	6.6
Native Wines.....	998,664 49	2,083,953 05	1,085,288 56	108.7
Imported Wines.....	1,152,444 08	1,153,891 45	1,447 37	1.3
Domestic Beers.....	16,660,675 62	19,621,165 10	2,960,489 48	17.8
Imported Beers.....	290,470 00	233,056 30	57,413 70 D.	19.8 D.
	\$48,995,591 19	\$55,360,569 81	\$6,364,978 62	13.0

The heaviest increases to be noted are in the sales of native wines, where the increase is 108.7 per cent., and the increase in domestic beers of 17.8 per

cent. Increases are also shown of 10.3 per cent. in domestic spirits, and 6.6 per cent. in imported spirits.

Control, to be effective, has to be a matter of growth and education. Too strictly administered from the first, it is merely an enlargement of the bootlegger's market, but with the constant lessening of bootleggers and the constant increase of knowledge of the principles of control, and its proper application, it becomes increasingly effective. Control, however, is not at all of necessity mirrored in the result of sales. There may be large sales without abuses, and there may be smaller sales with more abuses.

The constantly increasing number of tourists, from time to time, of necessity adds to the sales of liquor even with a strict and proper control. During the winter months the number of tourists are substantially less and a like comparison of the sales of last November, December, and of the first half of January, the last figures available, with those of a year ago, are of interest. They are as follows:—

	November, 1928	November, 1929	Increase	Per cent.	Decrease	Per cent.
Imported Spirits.....	\$1,558,033 80	\$1,513,440 03	.....	.....	\$44,593 77	2.8
Domestic Spirits.....	942,428 15	872,435 94	.....	.....	69,992 21	7.4
Imported Wines.....	100,018 15	71,796 90	.....	.....	28,221 25	28.2
Native Wines.....	87,473 60	159,970 30	\$72,496 70	82.9	.....	.....
Imported Beers.....	16,416 00	14,287 10	.....	.....	2,128 90	13.0
Domestic Beers.....	1,066,344 24	1,128,753 24	62,409 00	5.8	.....	.....
	\$3,770,713 94	\$3,760,683 51			\$144,936 13	.....
					134,905 70	.....
					\$10,030 43	.3
	December, 1928	December, 1929	Increase	Per cent.	Decrease	Per cent.
Imported Spirits.....	\$2,962,655 57	\$2,441,003 43	.....	.....	\$521,652 14	17.6
Domestic Spirits.....	1,554,540 40	1,297,474 00	.....	.....	257,066 40	16.5
Imported Wines.....	209,470 35	159,353 10	.....	.....	50,117 25	23.9
Native Wines.....	224,767 50	312,331 60	\$87,564 10	38.9	.....	.....
Imported Beers.....	22,786 80	17,412 20	.....	.....	5,374 60	23.6
Domestic Beers.....	1,554,507 11	1,377,290 63	.....	.....	177,216 48	11.3
	\$6,528,727 73	\$5,604,864 96			\$1,011,426 87	.....
					87,564 10	.....
					\$923,862 77	14.1
	January 1-15, 1929	January 1-15, 1930	Increase	Per cent.	Decrease	Per cent.
Imported Spirits.....	\$753,827 20	\$572,585 80	.....	.....	\$181,241 40	24.0
Domestic Spirits.....	414,834 20	341,911 80	.....	.....	72,922 40	17.6
Imported Wines.....	33,353 80	29,623 80	.....	.....	3,730 00	11.2
Native Wines.....	44,704 15	80,801 35	\$36,097 20	80.7	.....	.....
Imported Beers.....	6,591 60	6,355 20	.....	.....	236 40	3.6
Domestic Beers.....	377,546 72	428,594 87	51,048 15	13.5	.....	.....
	\$1,630,857 67	\$1,459,872 82			\$258,130 20	.....
					87,145 35	.....
					\$170,984 85	10.5

It will be noted that in November there was a decrease of \$114,585.98 in the sale of spirits; a decrease of \$28,221.25 in imported wines, and a decrease

in imported beers, resulting in a total decrease of \$144,936.13. From this, however, must be deducted the increase in the sale of native wine and domestic beers, which amounted to \$134,905.70, making a net reduction of \$10,030.43 for the month.

The drop in imported wines cannot be attributed to control, but to a decrease largely in the sale of expensive Champagnes which was a direct result of the drop in the stock market, accompanied by the decrease in purchasing power. Control always comes more into play in connection with the cheaper commodities.

In the December sales it will be noted that there is a decrease in the sale of spirits of \$778,718.54; in the imported wines \$50,117.25, a decrease also in imported beers, and in domestic beers, the resultant total decrease amounting to \$1,011,426.87 for the month. Again, however, there is an increase in the sale of native wine of \$87,564.10, which reduces the net reduction to \$923,862.77.

The comparison of sales, for the first half of January, shows a still greater proportionate decrease in the sale of spirits in 1930, as against 1929. The decrease amounts to \$254,163.80; and the decrease in imported wines and beers shown, make a total decrease of \$258,130.20, which is almost entirely attributable to the decreased sale of spirits. As against this, however, the sale of native wine increased by \$36,097.20 and domestic beers by \$51,048.15; a total net reduction of \$170,984.85 for the half month, therefore, results.

It must not be thought that similar reductions will of necessity apply the year round. They will if the legitimate demand be not increased; if the tourist business remains stationary, which is not expected. The term legitimate demand for liquor is used as covering cases unaccompanied by excess and where drunkenness, the neglect of the family, or law-breaking, are not in any way involved.

Then, again, the change of conditions may create an unusual and perfectly legitimate increase in the demand. Last winter, influenza and feverish colds were prevalent; many doctors advised the use of brandy. This year there was practically no influenza. In the first half of January, 1929, 2,146 cases of brandy were sold. In the same period, this winter, only 1,410 cases were sold; a reduction of 736 cases, or 34.3 per cent. Rum is also largely used for colds and influenza. In the same period, in 1929, 3,522 cases of rum were sold and in the same period, this winter, only 1,743 cases; a reduction of 1,779 cases, or 50.5 per cent.

ALCOHOL

It will be remembered in the report of last year, that the question of alcohol of a strength of 165 per cent. proof spirits was dealt with, and that grave abuses had been found to exist. The sale was stopped and alcohol only supplied on doctors' prescriptions. The Board is pleased to be able to report that the betterment in conditions, as shown in last year's report, has continued. Alcohol, as sold by the Board, is no longer being used as a beverage. The restrictions on its sale became effective on the first of July, 1928. The amount of alcohol sold during the two months prior to the change in 1928, and in the same two months of 1929, is as follows:—

1928		1929	
May 1st-15th.	519—26 oz. cases 1,038 gallons	May 1st-15th.	17—20 oz. cases 25½ gallons
May 16th-31st.	565—26 oz. cases 1,130 gallons	May 16th-31st	13—20 oz. cases 19½ gallons
June 1st-15th.	517—26 oz. cases 1,034 gallons	June 1st-15th.	12—20 oz. cases 18 gallons
June 16th-30th.	534—26 oz. cases 1,068 gallons	June 16th-30th.	12—20 oz. cases 18 gallons

It will be seen that the reductions in sales approximate 98 per cent. The sale has almost disappeared and great betterment has taken place. Much of the alcohol formerly purchased was undoubtedly made use of by bootleggers, who coloured it, watered it, flavoured it, and sold it as Scotch whiskey. This business has not entirely stopped. It is, however, very greatly reduced, but from time to time the Police make seizures of this 165 per cent. proof spirits alcohol. It is the belief of the Police that this alcohol in part is smuggled in from the United States. Fifty-four gallons of it, in American cans, were recently seized.

DANGEROUS SUBSTITUTES

In the report of last year, the Board referred to the drinking of rubbing alcohol. This had become a very grave question and the abuses were widespread. In some places it had been shown that approximately 50 per cent. of all the drunkenness was due to rubbing alcohol. Although rubbing alcohol is not sold in the Board's stores, and it was never intended for beverage purposes by the Dominion authorities, the Board has taken up the question and its sale by druggists. Druggists operate under permits issued by the Board and all who sell rubbing alcohol are now required to keep a register which contains the signatures and addresses of those purchasing, and the quantity purchased. A very substantial betterment has taken place. A Social Worker, who very properly complained of former conditions, now writes the Board:—

“RE SALE OF RUBBING ALCOHOL”

“I am very happy to be able to answer your enquiry favourably as to the good effects of your more stringent oversight in the sale of rubbing alcohol, etc., by druggists.”

“I visit the.....Police Court every morning and during the past seven or eight months there is a very marked decrease in the number brought in for drunkenness as the result of drinking rubbing alcohol. I should state at least a decrease of 75 per cent.”

“I congratulate and thank you for your quick and beneficial move in this matter.”

NATIVE WINE

With ever stricter control and resulting decreases in drunkenness caused by whiskey and the like, there has been an increase in drunkenness resulting from the drinking of native wine. In the figures dealing with the sales, large increases in the money value of sales of native wine have already been shown. The increased consumption, however, is greater than the money increase owing to the fact that the abolished Luxury Tax of 50 cents was all passed on to the consumer and an additional cut made by the manufacturers in their prices. As a result, native wine is now sold at \$1.50 per gallon, as against \$2.05 formerly, and by the bottle at 30 cents, as against 40 cents before the removal of the Tax.

The sales of native wine in Ontario, in gallons, have increased from 698,028 gallons in the year ending October 31st, 1928, to 1,693,242 gallons for the year ending October 31st, 1929, an increase of 142 per cent.

Permits are not necessary in order to enable purchases of native wine to be made at the wineries. The principle which obtained under the Ontario Temperance Act has been followed. Under the Ontario Temperance Act the minimum that could be purchased at any one time was one case of twelve bottles

or a five-gallon cask. When the Board first started to function, that minimum was cut down to one bottle, as it was felt that if a man only wanted to have one bottle of wine—one being enough in his own opinion for his purposes—that it was not in the interests of moderation to force him to buy 12 bottles. It was afterwards found that the purchase of only one bottle of wine at a time rendered the purchase too easy for young people and added to the temptation of taking a bottle in an automobile, and that, in the real interests of moderation, the minimum should be raised. It was first raised to six bottles, then reduced to three bottles in December, 1927, which is the present minimum. This three-bottle minimum has again been attacked on the ground that a man is forced to buy more wine than he really requires. It, however, is still being maintained for the reasons stated.

Beer has an alcoholic content of some 9 degrees of proof spirits; native wine has an alcoholic content of some 27 degrees of proof spirits. The fact that it is necessary to have a permit before the purchase of 9 per cent. beer can be made, while the purchase of 27 per cent. native wine is allowed without the restriction of a permit, in the opinion of the Board constitutes an anomaly which ought not to exist.

DOMINION TAXATION

The Dominion receipts from the liquor traffic for the past fiscal year have already been shown as \$58,430,955.69, exclusive of Sales Tax. The contribution of Ontario to this total is now considered.

In the year ending October 31st, 1928, the total amount paid the Dominion Government for Customs Duties, Excise Rates, Malt Duties, Beer Gallonage, and Sales Tax, exceeded \$15,500,000. The amount the Dominion received last year exceeded \$17,000,000. It is made up as follows:—

Customs Duties and Sales Tax on spirits, wines and imported beers.....	\$9,816,657 70
Excise Duties and Sales Tax.....	4,596,036 29

ON DOMESTIC BEERS

Malt, gallonage and sales tax on Ontario sales of 11,057,016 gallons (estimated) ..	2,543,113 68
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NATIVE WINES

Tax of 7½ cents per gallon, and Sales Tax paid by Ontario Wineries on direct sales in Ontario (estimated).....	50,000 00
	<u>\$17,005,807 67</u>

Over and above the above items, there are Dominion Taxes on 4.4 beer and liquors released for exportation to the United States amounting to a large sum which have not been taken into consideration. The net profits of the Province, while large, are relatively small compared to the Dominion revenues received from the liquor traffic. The proportion is the more marked when it is realized that all the disabilities resulting from the traffic are visited on the Province and not on the Dominion. The short-circuiting of liquors supposed to be exported and all other abuses of the traffic requiring much police activity and expense, are burdens borne by the Province and not by the Dominion. The difficult question of sale, largely rendering possible as it does these great Dominion revenues, is entirely looked after by the Province. Should the question of a proper division or allocation be ever considered, it is manifest that the ratio of the present division of the profits of the traffic should be entirely reversed and the greater proportion received by the Province.

LAW ENFORCEMENT

The thanks and appreciation of the Board are hereby tendered to the Provincial and Municipal Police Officers throughout the Province for the hearty co-operation extended, all of which has continued to produce good results.

We have the honour to be, Sir,

Your obedient servants,

H. L. DRAYTON,
Chief Commissioner.

S. McCLENAGHAN,
Deputy Chief Commissioner.

J. M. McNAMARA,
Commissioner.

BALANCE SHEET

31st October, 1929

ASSETS

Land, buildings, furniture, equipment, fixtures and alterations to rented premises, less amounts written off.....		\$227,654 22
Cash on hand and in banks.....	\$2,279,704 19	
Accounts receivable.....	77,358 80	
Inventories of liquor and supplies in warehouses and stores.....	2,877,698 63	
Prepaid charges.....		5,234,761 62
		40,336 98
		<u>\$5,502,752 82</u>

LIABILITIES

Accounts Payable, Accrued Charges, Deferred Revenue, etc.....	\$2,726,193 14	
Provincial Treasurer:		
Permit Sales—Balance from 1927.....	\$1,683 04	
“ —1928-1929 (net).....	989,457 08	
	\$991,140 12	
Less: Paid to Provincial Treasurer.....	985,000 00	
	\$6,140 12	
Permit Sales—1929-1930 (net).....	5,325 60	
Confiscated liquor.....	796 79	
	12,262 51	
Surplus 1st November, 1928.....	\$607,848 57	\$2,738,455 65
Balance from Profit and Loss Account for the year ending 31st October, 1929.....	9,661,448 60	
	\$10,269,297 17	
Less: Paid to Provincial Treasurer.....	7,505,000 00	
Surplus 31st October, 1929 (represented by goods purchased and other Assets).....		2,764,297 17
Contingent Liabilities:		
Goods ordered but not delivered.....	\$4,051,001 27	
Duty on goods in bond.....	1,144,597 30	
		<u>\$5,502,752 82</u>

Auditor's Certificate

☞ We certify that we have audited the books and accounts of the Liquor Control Board of Ontario for the year ending 31st October, 1929, and in our opinion the above balance sheet exhibits a true and correct view of the position of its affairs on that date.

CLARKSON, GORDON, DILWORTH, GUILFOYLE & NASH.

Chartered Accountants.

Toronto, 7th January, 1930.

PROFIT AND LOSS ACCOUNT

For the Year Ended 31st October, 1929

		Percentage of Sales	
		1929	1928
Sales (Schedule 1).....	\$55,360,569 81	100.00	100.00
Stock on hand 1st November, 1928.....	\$3,488,155 98		
Purchases.....	43,210,225 39		
	<u>\$46,698,381 37</u>		
Stock on hand 31st October, 1929.....	2,865,405 94		
Cost of stock sold.....	43,832,975 43	79.18	79.91
	<u>\$11,527,594 38</u>	20.82	20.09
Miscellaneous earnings.....	39,064 60	.07	.05
	<u>\$11,566,658 98</u>	20.89	20.14
Expenses:			
Administering and operating head office, warehouses and stores (Schedule II) .	\$2,666,146 22		
Depreciation of buildings, furniture, equip- ment, fixtures and alterations to rented premises, written off.....	148,832 48		
	<u>\$2,814,978 70</u>	5.08	5.81
	<u>\$8,751,680 28</u>	15.81	14.33
Other Revenue:			
Brewery warehouse fees.....	\$508,050 00		
Brewery fees.....	150,250 00		
Light beer licenses, standard hotels, etc..	43,838 00		
Fines (net).....	207,630 32		
	<u>909,768 32</u>	1.64	1.65
Carried to Balance Sheet.....	<u>\$9,661,448 60</u>	<u>17.45</u>	<u>15.98</u>

SCHEDULE I.

SUMMARY OF SALES

Year Ended 31st October, 1929

Store—Counter and mail order sales of wines, spirits and beer..	\$37,281,805 94	
Beer orders taken at stores for delivery by breweries and brewery warehouses.....	310,581 90	
Head office sales.....	34,391 37	
		\$37,626,779 21
Beer sales by breweries and brewery warehouses.....		17,733,790 60
		<u>\$55,360,569 81</u>

SCHEDULE II.

ADMINISTRATION AND OPERATING EXPENSES—HEAD OFFICE, WAREHOUSES
AND STORES

For Year Ended 31st October, 1929

And Number of Employees on the Staff at 31st October, 1929

	Head Office	Warehouses	Stores	Total	Percentage to Total Sales	
					1929	1928
Executive salaries.....	\$54,416 12			\$54,416 12	.10	.11
Salaries.....	547,762 65	\$96,288 87	\$1,023,354 55	1,667,406 07	3.01	2.88
Legal and audit fees..	17,280 12			17,280 12	.03	.06
Rentals.....	21,600 00	14,850 87	165,167 16	201,618 03	.36	.38
Travelling.....	45,511 12	147 62	1,290 85	46,949 59	.08	.08
Foreign exchange.....	13 09		(Cr.)11,755 75	(Cr.)11,742 66	.02	.01
Insurance.....	4,484 28	5,707 21	39,283 07	49,474 56	.09	.10
Postage.....	12,110 63	164 45	6,943 50	19,218 58	.04	.04
Stationery.....	32,343 43	4,016 56	25,961 65	62,321 64	.11	.10
Telephone and tele- graph.....	4,708 84	330 60	7,186 27	12,225 71	.02	.03
Dominion Electric Pro- tective Services.....		310 40	5,799 92	6,110 32	.01	.01
Breakage.....		2,640 95	11,979 86	14,620 81	.03	.04
Light, heat and power	4,515 01	5,017 65	29,692 06	39,224 72	.07	.07
Repairs and mainten- ance.....	8,883 46	8,478 31	50,388 18	67,749 95	.12	.04
Sundries.....	19,426 38	1,628 37	16,223 68	37,278 43	.07	.07
Freight and cartage ..	81 42	401 22	239,701 40	240,184 04	.43	.40
Terminal Warehouse charges.....		81,330 67		81,330 67	.15	.16
Discounts to hospitals, etc.....			14,870 35	14,870 35	.03	.03
Truck maintenance...	521 04	2,660 08	13,147 14	16,328 26	.03	.03
Packing materials.....		1,935 89	27,345 02	29,280 91	.05	.05
	\$773,657 59	\$225,909 72	\$1,666,578 91	\$2,666,146 22	4.81	4.69

Percentage of total expenses.....	29.02%	8.47%	62.51%	100.00%
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Percentage of total sales—				
1929.....	1.39%	.41%	3.01%	4.81%
1928.....	1.37%	.44%	2.88%	4.69%

NUMBER OF EMPLOYEES ON THE STAFF

Commissioners and staff.....	9
General Manager's office.....	4
Comptroller's office.....	10
Legal office.....	2
Accounting office.....	86
Beer Department.....	36
Stock Supervisors.....	11
Customs.....	5
Traffic Department.....	5
Purchasing Department.....	11
Inspection Department.....	13
General Inspectors.....	8
Permit Department.....	29
Maintenance.....	7
Supervision of Stores.....	2
Properties Superintendence.....	3
Brewery Inspectors.....	173
Central Registry.....	2
Warehouses.....	70
Stores.....	653
Garage.....	7
	<hr/>
	1,146

SCHEDULE III

LIQUOR STORES, LICENSED BREWERS' WAREHOUSES, BREWERIES AND WINERIES IN ONTARIO AT 31st OCTOBER, 1929

LIQUOR STORES

Store No.		
1	Lombard and Church Streets.....	Toronto
2	154 Wellington Street West.....	Toronto
3	1271 Dundas Street West.....	Toronto
4	170 Danforth Avenue.....	Toronto
5	1881 Queen Street East.....	Toronto
6	1271 Queen Street West.....	Toronto
7	2223 Dundas Street West.....	Toronto
8	1165 St. Clair Avenue West.....	Toronto
9	959 Bloor Street West.....	Toronto
10	617 Yonge Street.....	Toronto
11	949 Gerrard Street East.....	Toronto
12	402 Parliament Street.....	Toronto
13	1448 Danforth Avenue.....	Toronto
14	454 Spadina Avenue.....	Toronto
15	272 Dupont Street.....	Toronto
16	106 Richmond Street West.....	Toronto
18	Midland Avenue and Kingston Road.....	Scarboro Bluffs
19	Rogers Road and Blackthorn Avenue.....	Toronto
20	783 Lake Shore Road.....	New Toronto
21	29 Charles Street.....	Hamilton
22	673 King Street East.....	Hamilton
23	334 Ottawa Street North.....	Hamilton
24	88 Fraser Street.....	Port Colborne
25	81 King Street West.....	Dundas
26	419 Talbot Street.....	London
27	647 Dundas Street.....	London
28	12 Canal Street.....	Dunnville
29	Burford Street.....	Warton
30	82 Durham Street.....	Walkerton
31	334 London Street West.....	Windsor
32	52 Wyandotte Street East.....	Windsor
33	93 Drouillard Road.....	East Windsor
34	82 Victoria Road.....	Walkerville
35	29 Sandwich Street.....	Sandwich

LIQUOR STORES—Continued

Store No.		
36	272 Queen Street	Ottawa
37	685 Bank Street	Ottawa
38	188 Rideau Street	Ottawa
39	King Street	Cobourg
40	Market Square	Kingston
41	209 Victoria Avenue	Fort William
42	101 King Street West	Brockville
43	137 King Street East	Kitchener
44	69 Dalhousie Street	Brantford
45	408 George Street	Peterborough
46	Christina and Cromwell Streets	Sarnia
47	Ontario Street	St. Catharines
48	937 Victoria Avenue	Niagara Falls
49	66 Pitt Street	Cornwall
50	Cedar and Elgin Streets	Sudbury
51	72 Carden Street	Guelph
52	269 Main Street East	Welland
53	66 Cumberland Street South	Port Arthur
54	88 Main Street East	North Bay
55	185 Alexandria Street	Pembroke
56	Water Street	Prescott
57	52 Bridge Street East	Belleville
58	4 Balsam Street North	Tinamins
59	72 Collier Street	Barrie
60	88 Ontario Street	Stratford
61	210 King Street West	Chatham
62	314 Talbot Street	St. Thomas
63	343 Queen Street East	Sault Ste. Marie
64	516 Dundas Street	Woodstock
65	Front Street	Trenton
66	6th Avenue North	Cochrane
67	Main and Ferguson Streets	Haileybury
68	214 Main Street South	Kenora
69	Church and Mowat Streets	Fort Frances
70	22 Beckwith Street	Smith's Falls
71	King and Main Streets	Gananoque
72	34 Gore Street	Perth
73	610 King Street	Preston
74	61 Robinson Street	Simcoe
75	226 Devonshire Avenue	Iroquois Falls
76	Prospect and Silver Street	Cobalt
77	121 Main Street	Penetang
78	Whitewood Avenue	New Liskeard
79	79 Walton Street	Port Hope
80	Great North Road	Parry Sound
81	Main and Queen Streets	Sturgeon Falls
82	79 Kent Street	Lindsay
83	31 Main Street West	Hawkesbury
84	Main Street	Picton
85	Daniel and Elgin Streets	Arnprior
86	Queen and White Streets	Dryden
87	Front Street	Sioux Lookout
88	River Street	Paris
89	Main and Mattawa-Pembroke Highways	Mattawa
90	68 Simcoe Street North	Oshawa
91	29 Duncan Street	Kirkland Lake
92	91 Fourth Avenue	Englehart
93	Gilmour Road	Fort Erie
94	Bridge Street North	Eganville
95	21 Water Street North	Galt
96	112 Main Street	Deseronto
97	Dundas Street	Napanee
98	22 Main Street	Alexandria
99	Emard Street	Embrun
100	25 Albert Street	Thorold
101	48 Main Street West	Grimsby
102	Muskoka Street	Gravenhurst
103	Tudhope Street	Espanola
104	Main Street East	Thessalon
105	Concession Street	Tamworth

LIQUOR STORES—Continued

Store No.		
106	Main Street	Huntsville
107	Main Street	Palmerston
108	Woodward Avenue	Blind River
109	Murray Street	Amherstburg
110	46 Wallace Street	Wallaceburg
111	Bedford Street	Westport
112	37 Government Road	Kapuskasing
113	Opongo Street	Barry's Bay
114	Corner Fourth Street and Broadway	Rainy River
115	43 King Street North	Waterloo
116	Arthur Street	Elmira
117	Birch Street	Chapleau
118	Young Street	Capreol
119	Main Street	Merrickville
120		Pelee Island
121	1008 Wellington Street West	Ottawa
122		Hearst
123	Corner Main and Collins Streets	Lancaster

BREWERS' WAREHOUSES

Warehouse No.		
1W	351 Front Street East	Toronto
2W	74 King Street East	Toronto
3W	581 Queen Street West	Toronto
4W	398 College Street	Toronto
5W	699 Bloor Street West	Toronto
6W	1485 Queen Street West	Toronto
7W	2233 Dundas Street West	Toronto
8W	1083 St. Clair Avenue West	Toronto
9W	484 Danforth Avenue	Toronto
10W	1852 Danforth Avenue	Toronto
11W	12-14 Ferguson Street	Hamilton
12W	Barton and Ottawa Streets	Hamilton
13W	180 King Street	London
14W	665 Dundas Street	London
15W	413 Hamilton Road	London
16W	1153 McDougall Street	Windsor
17W	1636 Ottawa Street	Windsor
18W	1503 London Street West	Windsor
19W	268 Queen Street	Ottawa
20W	Broad and Wellington Streets	Ottawa
21W	Ontario and Queen Streets	Kingston
22W	580 Victoria Avenue	Niagara Falls
23W	78 Niagara Street	St. Catharines
24W	11 College Street	Kitchener
25W	217 Talbot Street	St. Thomas
26W	Water and Lorne Streets	Port Arthur
27W	268 George Street	Peterborough
28W	23 Water Street	Brantford
29W	113 Quebec Street East	Guelph
30W	58 Brock Street	Brockville
31W	6 Dover Street	Chatham
32W	221 Sherman Avenue North	Hamilton
33W	150 Pinnacle Street	Belleville
34W	1 Pitt Street	Cornwall
35W	University and Spring Streets	Cobourg
36W	King Street	Prescott
37W	22 Lorne Street	Sudbury
38W	143 Victoria Street North	Sarnia
39W	107 Oak Street West	North Bay
40W	2 King Street East	Lindsay
41W	Railway Street	Cochrane
42W	605 Bay Street	Sault Ste. Marie
43W	Beckwith Street	Smith's Falls
44W	Ridgeway Street	Trenton
45W	Burger and Victoria Streets	Welland
46W	492 Peel Street	Woodstock
47W	423 Erie Street	Stratford
48W	Killally Street	Port Colborne

BREWERS' WAREHOUSES—Continued

Warehouse No.		
49W	1 Second Avenue.....	Timmins
50W	Argyle Street.....	Simcoe
51W	269 Mill Street.....	Port Hope
52W	19 Main Street.....	Penetang
53W	193 Victoria Street.....	Pembroke
54W	553 King Street.....	Preston
55W	27 Cockburn Street.....	Perth
56W	Railway Street.....	Kenora
57W	101 Church Street.....	Fort Frances
58W	King Street.....	Gananoque
59W	Gilmour Road.....	Fort Erie
60W	Post Office Square.....	Barrie
61W	180 Drouillard Road.....	East Windsor
62W	Main Street.....	Huntsville
63W	Ferguson Avenue.....	Haileybury
64W	145 Main Street.....	Hawkesbury
65W	William Street.....	Arnprior
66W	106 Lake Shore Road.....	Mimico
67W	Main Street.....	Picton
68W	Murray Street.....	Amlherstburg
69W	North Cayuga Street.....	Dunnville
70W	Main Street.....	Belle River
71W	Main Street.....	Glencoe
72W	Champagne Street.....	Parry Sound
73W	Main Street.....	Ridgetown
74W	Queen Street South.....	Tilbury
75W	106 Tecumseh Road.....	Tecumseh
76W	897 Queen Street East.....	Toronto
77W	King Street West.....	Dundas
78W	497 James Street North.....	Hamilton
79W	426 Bank Street.....	Ottawa
80W	223 Dalhousie Street.....	Ottawa
81W	161 King Street West.....	Oshawa
82W	14 St. Paul Street.....	St. Catharines
83W	9 Market Street.....	Thorold
84W	Colborne Street.....	Oakville
85W	Front Street.....	Sioux Lookout
86W	Burford Street.....	Warton
87W	35 Goodfish Road.....	Kirkland Lake
88W	Durham Street.....	Walkerton
89W	39 Dickson Street.....	Galt
90W	Muskoka Road and Main Street.....	Gravenhurst
91W	Mill Street.....	Napanee
92W	30 Wyandotte Street.....	Windsor
93W	Nelson Street.....	Wallaceburg
94W	1395 Gerrard Street East.....	Toronto
95W	Goderich Street.....	Port Elgin
96W	2 Marlborough Street South.....	E. Cornwall
97W	1 Main Street.....	Morrisburg
98W	2420 Dufferin Street.....	Fairbank
99W	1145 Yonge Street.....	Toronto
100W	Main Street.....	Palmertson
101W	Regent and King Streets.....	Niagara-on-the-Lake
102W	3333 Danforth Avenue.....	Toronto
103W	Government Road.....	Kapuskasing
104W	Broad and Wellington Streets (Distributing Depot).....	Ottawa
105W	105 Victoria Avenue.....	Fort William

BREWERIES

Bixel Brewing & Malting Company, Limited.....	Brantford
Brading Breweries, Limited.....	Ottawa
British American Brewing Company, Limited.....	Windsor
Budweiser Brewing Company of Canada, Limited.....	Belleville
Canada Bud Breweries, Limited.....	Toronto
Capital Brewing Company, Limited.....	Ottawa
Carling Breweries, Limited.....	London
Copland Brewing Company, Limited.....	Toronto
Cosgrave Export Brewery Company, Limited.....	Toronto

BREWERIES—Continued

Cronmiller & White Brewing & Malting Company, Limited.....	Welland
Dominion Brewery Company, Limited.....	Toronto
Formosa Springs Brewery, Limited.....	Formosa
Fort Frances Brewing Company, Limited.....	Fort Frances
Gold Belt Brewery, Limited.....	Timmins
Grant's Spring Brewery Company, Limited.....	Hamilton
Hamilton Brewing Association, Limited.....	Hamilton
Hofer Brewing Company, Limited.....	La Salle
Huether Brewing Company, Limited.....	Kitchener
Kakabeka Falls Brewing Company, Limited.....	Fort William
Kormann's Beverages, Limited.....	Toronto
Kuntz Brewery, Limited.....	Waterloo
John Labatt, Limited.....	London
Lake Ontario Brewing Company, Limited.....	Kingston
Lake-of-the-Woods Brewing Company, Limited.....	Kenora
O'Keefe's Beverages, Limited.....	Toronto
Perth Brewery.....	Stratford
Port Arthur Beverage Company, Limited.....	Port Arthur
Reinhardt Brewery Company, Limited.....	Toronto
Riverside Brewery Company, Limited.....	Riverside
Rock Brewery, Limited.....	Preston
Sleeman's Spring Bank Brewing Company, Limited.....	Guelph
Soo Falls Brewing Company, Limited.....	Sault Ste. Marie
Sudbury Brewing & Malting Company, Limited.....	Sudbury
St. Clair Brewing Company, Limited.....	Tecumseh
Taylor & Bate, Limited.....	St. Catharines
Wulkerville Brewery, Limited.....	Walkerville

BREWERIES LOCATED OUTSIDE THE PROVINCE OF ONTARIO WHOSE PRODUCTS ARE SOLD THROUGH ONTARIO BREWERS' WAREHOUSES

Molson's Brewery, Limited.....	Montreal, Que.
Frontenac Breweries, Limited.....	Montreal, Que.
Ontario National Beverages.....	Montreal, Que.
(Dow Brewery—Montreal)	
(Dawes Brewery—Montreal)	

WINERIES

Badalato, S.....	R.R. 9.....	London
Bayliss, F. W.....	427 Spadina Avenue.....	Toronto
Belluz, Pietro.....	514 McTavish Street.....	Fort William
Bradley, E. C.....	R.R. 1.....	Fonthill
Bright, T. G., & Co., Limited.....		Niagara Falls
Canada Vine Growers.....		Cooksville
Canada Wine Products, Limited.....	83 King Street West.....	Toronto
Canada Wine Company.....	889 Queen Street West.....	Toronto
Castrucci, O. A.....	187 Parliament Street.....	Toronto
Ciurluini, A.....	R.R. 4.....	St. Catharines
Clark, F. C.....	31 John Street South.....	Hamilton
Concord Wine Company, Limited.....	181-185 Bathurst Street.....	Toronto
Danforth Wine Company.....	355 Danforth Avenue.....	Toronto
Davie Brothers.....	176 Minto Street.....	Sudbury
Deconza, Antonio.....	51½ North Street.....	St. Catharines
Dibbley, Mrs. R. E.....	1 Tournier Street.....	Sandwich
Dominion Wine Growers.....	Dundas Street.....	Oakville
Fort William Wine Company.....	114 McVicar Street.....	Fort William
Furminger, F. L.....	R.R. 2.....	St. Catharines
Grimsby Grape & Wine Company.....	Niagara Highway.....	Grimsby
Hamilton, J. S., & Company, Limited.....	44 Dalhousie Street.....	Brantford
Hamilton Niagara Wines, Limited.....	Hess and Harriet Streets.....	Hamilton
Huehnergard, B.....	R.R. 3.....	Kitchener
Jordan Wine Company.....		Jordan
Kampman, Fred.....	217 Breithaupt Street.....	Kitchener
Lincoln Wines, Limited.....		St. Catharines
London Winery.....	R.R. 1.....	London
Meconi, Mariano.....	421 Wyandotte Street East.....	Windsor
National Fruit & Wine Company.....	31 Brock Avenue.....	Toronto
Old Fort Wine Company.....		Fort Erie
Ontario Grape Growing Company.....		St. Catharines

WINERIES—Continued

Ontario Wine Company.....	Stop 22, Lake Shore Road.....	New Toronto
Parkdale Wines, Limited.....	1363 Queen Street West.....	Toronto
Peerless Wine, Limited.....	448 Queen Street East.....	Toronto
Pensa, Phillip.....	24 Yonge Street.....	Kitchener
Porpiglia, Jos.....	R.R. 2.....	St. Catharines
Rizzo, Nicholas.....	137 York Street.....	Hamilton
Robinet, Freres.....	320 Brock Street.....	Sandwich
Robinet, Jules.....	17½ Sandwich Street East.....	Sandwich
Robinet, Victor.....	141 Sandwich Street East.....	Tecumseh
Rossoni, Carlo.....	1218 Tecumseh Road East.....	Windsor
St. Catharines Wine Company.....	Woodburn Avenue.....	St. Catharines
Samborski, Albin.....	Saltfleet Township.....	Stoney Creek
Stamford Park Wine Company.....	R.R. 3.....	Niagara Falls
Subosits, Victor.....	Box 64.....	Welland
Tadeussov, Thomas.....	.....	Niagara Falls
Tantardini, John.....	32 Wilson Street.....	Guelph
Thomas, Alexander.....	Dundas Street.....	Cooksville
Thorold Winery Company, Limited.....	Ormand Street.....	Thorold
Toronto Wine Manufacturing Company.....	1682 Queen Street West.....	Toronto
Turner Wine Company.....	106 Front Street East.....	Toronto
Windsor Company, Limited.....	Walker Rd. and Edna Sts.....	Walkerville

SCHEDULE IV

STATEMENT SHOWING THE NUMBER OF PERMITS AND LICENSES ISSUED DURING THE TWELVE MONTHS' PERIOD ENDING 31st OCTOBER, 1929

PERMITS

November 1st, 1928, to October 31st, 1929:—

Resident.....	416,185	
Temporary.....	107,164	
Duplicate.....	17,137	
Physicians.....	360	
Druggists.....	1,172	
Dentists and Veterinary Surgeons.....	227	
Manufacturers.....	259	
Mechanical and Scientific.....	104	
Minister of the Gospel.....	169	
Hospital.....	267	
		543,044

LICENSES

Brewers' Licenses.....	43	
Brewers' Warehouses.....	1,697	
		1,740
Native Wine Permits.....	53	
Sacramental Wine Vendorships.....	4	
Non-Potable Alcohol.....	5	
Standard Hotel.....	401	
		463
Brewers' light beer permits.....	27	
Brewers' light beer warehouse permits.....	48	
Hotel light beer permits.....	829	
Restaurant light beer permits.....	486	
Shop light beer permits.....	235	
Club light beer permits.....	34	
Steamships' light beer permits.....	3	
Employees' light beer permits.....	336	
Picnic light beer permits.....	8	
		2,006
		4,209

REPORT
OF THE
Minister of Public Works

FOR THE
PROVINCE OF ONTARIO

FOR THE
TWELVE MONTHS ENDING 31st OCTOBER

1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 13, 1930



ONTARIO

TORONTO

Printed and Published by Herbert H. Ball, Printer to the King's Most Excellent Majesty

1930

1911

Ministry of Public Works

1911

1911



TO HIS HONOUR WILLIAM D. ROSS, ESQ.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of Your Honour and the Legislative Assembly, the Annual Report of the works under the control of the Public Works Department, comprising the reports of the Deputy Minister, the Architect and the Engineers for the twelve months ending the 31st of October, 1929.

Respectfully submitted,

GEO. S. HENRY,
Minister of Public Works and Highways.

Department of Public Works, Ontario,
Toronto, February 24th, 1930.

REPORT

OF THE

Deputy Minister of Public Works

HONOURABLE GEORGE S. HENRY,
Minister of Public Works and Highways.

SIR,—

I have the honour to submit a summary of the works performed by the Department of Public Works during the fiscal year ending October 31st, 1929.

Parliament and Departmental Buildings.—The boiler room in the Parliament Buildings was discontinued after a six-inch steam main was constructed from the central heating plant in the East Block, Parliament Buildings. The space occupied by the boiler room and coal bunkers in the Parliament Buildings will be converted into storage space as opportunity permits. A steam main was laid to the new Pathological Building of the University of Toronto, now being constructed on the north side of College Street and arrangements were made whereby this building will be heated from the East Block boilers. The offices of the Mothers' Allowances Commission and the Old Age Pensions Commission were moved into the building known as No. 43 Queen's Park from space formerly occupied in the East Block.

Maintenance and Repairs of Government Buildings.—Repairs and renewals required on Government Buildings were executed together with decorating of certain rooms in Government House and the alterations of other rooms in Osgoode Hall to provide for the Public Trustee. In addition, fireproof doors were installed at fire walls in Osgoode Hall in order to isolate a fire should it occur.

Educational Buildings.—At the Ontario School for the Deaf, Belleville, two new stokers were installed under two of the boilers thus enabling two boilers to heat the Institution which formerly required four stoker-fired boilers. Work was commenced on a pumping system to divert sewage from the Institution from flowing into the Bay of Quinte into the sewerage system of the City of Belleville. On completion of this pumping system, the dumping of the sewage into the Bay of Quinte will be discontinued.

Agricultural Buildings.—At Ontario Agricultural College, Guelph, a new Horticultural Building was commenced and almost completed by the end of the year. Work was also begun on the new Administration Building and Students' Residence Building, which will accommodate three hundred and sixty-two students when completed. A new central heating plant and distributing system was also commenced. The water supply of the Institution was

improved by installing an electrically driven deep well pump which on completion and test provided two hundred and twenty-five Imperial gallons per minute of the best of water. At the Horticultural Experimental Station, Vineland, a new double house was completed and electric wiring was installed in the green house. At Experimental Farm, Ridgetown, an additional building in connection with the school was erected for the teaching of live stock, manual training and physics. At Vimy Ridge Farm, just west of Guelph, hydro-electric current was installed in order to operate the lighting and other services about the farm requiring power. At Agricultural College, Kemptville, an addition to the Students' Residence was completed providing for forty students.

Public Institution Buildings.—At Boys' Training School, Bowmanville, an addition to the school to accommodate one hundred and twenty students was erected. At the same Institution a new Gymnasium Building was erected and swimming pool was also completed. At Ontario Hospital, London, a new passenger elevator was installed and the water supply was improved by lowering the deep well pump which on test showed an output of over two thousand Imperial gallons per day of twenty-four hours which is more than sufficient for the needs of the Institution during the driest summer weather.

District Buildings.—A new lockup was completed at Englehart. A Mines Rescue Station for the Department of Mines was completed at Timmins. An addition was made to the lockup at Gowganda. An addition was made to the vault of the Mining Recorder's office at Swastika. A concrete sidewalk was laid in front of the court house at Cochrane. Electric service was installed in the Government Buildings at Gore Bay replacing oil lamps. Two new rooms were constructed on the third floor in the court house at Fort Frances to provide space for the juries. The old registry office building at Fort Frances, was fitted up with cells and provided with office space for the use of the Provincial Police. An addition to the lockup at Kirkland Lake was constructed. Work was commenced on the new jail at Kenora, also on a new jail at North Bay and a new jail at Sudbury. The employment offices of the Department of Labour were moved from Bay and Front Streets, Toronto, to more convenient premises at Church and Adelaide Streets, Toronto. At the Ontario Government Building, Exhibition Park, Toronto, copper cornices and copings were installed in order to protect these portions of the building from the weather.

In addition to the above, the usual maintenance and repairs at the different buildings was attended to.

Engineer's Branch.—Bridge construction during the year amounted to one hundred and three structures of which forty-nine were reinforced concrete, five were of steel construction and forty-nine of timber. A storage dam was built on the Black River at Raven Lake. An addition was made at Port Sydney Dam by placing a concrete wall across the easterly opening. Control dams were also commenced on the Black River at Trout Lake and at Rainy Lake.

Drainage Aid.—Twelve municipal drainage schemes were inspected and statutory grants paid.

Navigation.—Repairs to locks, dams and swing bridges on inland navigation under the control of the Department were carried out.

Secretary's Report.—The Secretary and Purchasing Agent's report gives list of contracts for materials and works during the year.

The Accountant's Report gives the cost in detail of the expenditure by the Department of Public Works, during the year from which the following summary is taken:—

Civil Government:	
Salaries, contingencies, etc.....	\$82,679 44
Government Buildings:	
Maintenance and repairs.....	785,304.25
Public Buildings:	
Parliament Buildings, Hospitals, Schools, Court Houses, etc.....	927,592.82
Public Works:	
Locks, dams, bridges, etc.....	236,917 45
Drainage Aid:	
Aid to Municipalities under Drainage Act.....	60,478 00
Grant, Beaudette River Drain, Charlottenburg.....	10,000 00
Special Warrant:	
Ontario School for Deaf, Belleville, equipment.....	2,490 50
Statutory:	
Minister's salary.....	8,000 00
Total expenditure, Department of Public Works.....	<u>\$2,113,462 46</u>

GEO. HOGARTH,
Deputy Minister of Public Works.

Toronto, February 19th, 1930.

HONOURABLE GEORGE S. HENRY,

Minister of Public Works and Highways.

SIR,—

I have the honour to report on the work done in the Architect's Branch of the Department of Public Works for year ending October 31st, 1929.

Parliament Buildings.—The buildings, including East Block and those in connection with same, including Nos. 5, 15, 43 and 47 Queen's Park have all been kept in good repair and painted where necessary. Some of the offices and corridors in the Parliament Buildings have been re-decorated.

Improvements have been made in the heating plant of the Parliament Buildings by linking up the system with the boilers in East Block, steam being conveyed by mains through the tunnel connecting the two buildings and thus dispensing with the boiler plant in the Parliament Buildings and the labour in operating same. It is proposed to convert the space now occupied by the old boilers into storage vaults, which are badly needed. The steam main now leading from the boilers in the boiler house of the East Block to the Psychiatric Hospital has been extended to the Pathological Building in connection with the University of Toronto, now being erected on the north side of College Street and it is the intention that this building should also be heated from our plant.

Repairs have been made to No. 5 Queen's Park which has been taken over by the University of Toronto. Some changes were made in the attic to accommodate the official photographer of the Ontario Government, who was moved from No. 15 Queen's Park to provide accommodation for the Soldiers' Aid in that building.

No. 43 Queen's Park having been purchased by the Government, is now occupied by the Mothers' Allowances Commission and the Old Age Pension Board. Some slight alterations were made, as necessary, the rooms decorated and put in good condition.

110 University Avenue.—Repairs have been made, as necessary to this building and improvements made in the heating apparatus and the operation of same.

Government House.—The residence and buildings in connection with same have been kept in good condition; some portions of the building, including His Honour's office, Secretary's office, waiting room, morning room some of the bedrooms and the upper part of the main hall were decorated. Furniture and furnishings were renewed as required. The stable, garage and greenhouse were painted.

Osgoode Hall.—The building, generally, has been kept in good repair; about the usual amount of work has been done. Some slight alterations were made in the west wing to provide accommodation for the increased staff of the Public Trustee's Department. In connection with the fire protection, the building has been divided into sections and fireproof doors placed at all intersections; these throughout the building on all floors. The work is being done under contract by Messrs. A. B. Ormsby Co. of Toronto.

EDUCATIONAL BUILDINGS

Repairs and painting have been done as required to the Normal and Models Schools, Toronto and Ottawa; Normal Schools, Peterborough, London, Stratford, Hamilton and North Bay and the English-French Schools at Sturgeon Falls, Sandwich and Embrum; Ontario School for Deaf, Belleville, and School for Blind, Brantford. The heating, ventilation, electric light, sewage and water supply plants in connection therewith have received the attention of the officials of the Department.

The lavatory for junior boys on the ground floor of the Model School, Toronto, has been enlarged, walls being tiled and enclosures of marble and new partitions installed. The tile and marble work was done under contract by the Italian Mosaic & Tile Co. of Toronto, and the plumbing work by plumbers in the employ of the Department.

Plans and specifications were prepared for the installation of lavatories in the English-French School at Embrum. Considerable alterations had to be made in the basement, rooms having to be constructed. The plumbing work was carried out under contract by McKinley & Northwood Limited of Ottawa.

School for Deaf, Belleville. Outside of the ordinary repairs to the various buildings in connection with this Institution, the only work of importance carried out this year was the installation of underfeed stokers in two of the boilers, replacing those which were worn out and bricking in of the boilers. The work was done by men employed by the Department. A domestic hot water heater was installed in the boys' and girls' dormitories to replace one work out beyond repair. All this work was done under the supervision of the Heating Engineer.

School for Blind, Brantford. Contracts were awarded to R. J. Hawke and F. S. Moyer for painting the interior and exterior of the boys' and girls' dormitory buildings. As the work was commenced too late in the season, only a portion of it could be done before the opening of the school; the remainder will be completed during the coming season.

Public, Separate, Continuation and High Schools. Plans and specifications as follows, were submitted to the Department for examination and approval, Technical, addition to the Collegiate Institute, Galt; Westdale School, Hamilton; addition to Technical School, Kingston; High School of Commerce as an addition to the Glebe Building, Ottawa; Technical School, Sault Ste. Marie; addition to High School of Commerce, Toronto, and Technical School, Welland.

To the following places, school plans, or alterations to existing buildings have been submitted by the Department, Ayton Village; Separate School, Barry's Bay; North Cobalt Public School; S.S. No. 15, Caledon; S.S. No. 22, Cramahe; S.S. No. 13, Drummond; S.S. No. 6, Edgar; Public School, Glencoe; Continuation School, Powassan.

AGRICULTURAL BUILDINGS

Ontario Agricultural College, Guelph.—The old administration building has outlived its lifetime, is out of date both in plan and design, not in keeping with the requirements of the present day; showing sign of decay and is a menace in case of fire, the flooring, walls and roof being of wood construction. The laundry,

boiler house, pump room, machine and electric shops, and the well supplying water to all of the buildings in the College are all crowded together under the same roof.

A meeting was held on April 19th, between a Committee of the Alumni, the President of the College and a Committee of the Staff, at which I was present in an advisory capacity, to discuss the altering of the old building, or the erection of a new one. The matter was thoroughly discussed and some of the Alumni were very much in favour of changing and adding to the old building, but when the cost of doing so was explained to them and they were shown through the old building, they unanimously decided that a new building should be erected, and a recommendation was forwarded to your Government that a new building be erected, with the result that this Department was instructed to prepare plans and specifications, which was done, tenders called for and the contract for general trades awarded to Jackson-Lewis Company of Toronto. The work has been commenced and will be continued as weather permits.

The building is designed in what is known as Tudor Gothic, has a frontage of 261 feet 6 inches with wings on each side of 214 feet, is five storeys in height, including basement and attic. The building is fireproof construction throughout. The foundations are of concrete to the grade line, walls from grade line to roof being faced with limestone from the Queenston Quarries, backed up with brickwork. The field will be laid out in rock faced random coursed ashlar, the jambs, heads, all cornices and moulded work being tooled. The roof will be of reinforced concrete covered with slate.

The outstanding feature which dominates the design is the central tower, 28 feet by 90 feet in height with a time clock 7 feet 6 inches in diameter about 50 feet from the ground. The main entrance is in the tower, approached through a massive and handsome archway to the vestibule lined with stone with stone steps leading to the main hall and a grand stairway leading from same to the upper floor, which is to be constructed of Shelbourne stone. The walls of the main hall will be lined with the same stone and continued up the staircase. Corridors seven feet in width extend from each side of the main hall and through wings, and all floors of corridors on the first floor will be terrazzo with marble base at walls. All other corridor floors will be of cement covered with battleship linoleum with border of terrazzo, with marble base at walls. The floors of all apartments throughout will be cement covered with battleship linoleum with the exception of the reception room, private diningroom, lavatories, kitchen and rooms adjoining, the former being of wood and the latter of tile.

The administration offices and vaults are all located in the central section of the building, with Bursar's office at the northwest corner, reception room in the southeast corner with private diningroom adjoining. The rest of the floor is given over to the students' dormitories.

There are three principal entrances, the main entrance before mentioned and one at each end of the wings with stone steps leading to the corridors. There are also two entrances at the side and two entrances at the rear end of the wings with staircases leading to the upper floors and private staircase next to the reception room leading to the guest's rooms on the second floor.

Provision is made in the basement for post office, photographic rooms, barber shop, rooms for publications, trunks and store rooms, cloak rooms, etc., students' common room, cafeteria, kitchen, servery and dish-washing rooms, etc., in connection therewith are located in the northeast wing, the ice machinery and cold storage room being located in a sub-basement under the

kitchen. The cafeteria will be 48 feet 6 inches by 81 feet and will be fully equipped in the latest style.

This building will be heated from the main boiler house.

Provision has been made for an elevator in the centre of the main corridor, which will travel from the basement to the attic.

The total accommodation when sections 1, 2 and 3 are completed will be 362 students. Should it be decided in the future to extend the building across the north side of the quadrangle, a total accommodation of 490 students will be provided for.

It will be understood that the above work is of considerable magnitude and includes taking down the present building and the erection of a new one on the same site. The new boiler house must be erected and completed before the heating and electric plants can be dismantled and the removal of the water tower and mains. It also means changing and connecting up of the heating mains and water supply to the numerous buildings from the new boiler plant and the re-distribution of water mains and electric service.

Plans and specifications were prepared for a new boiler house, which is being erected under contract by Jackson-Lewis Company of Toronto, and located about 800 feet from the Administration Building. This building is 52 feet by 112 inches and includes boiler room, machinery room and oil storage on the first floor. The boiler room is continued to the roof. A mezzanine floor has been placed overlooking the machine room and boiler room, which includes the Engineer's office, Engineer's workshop and electric transformer room. Lavatory provision has been made on both floors. The building is being constructed of concrete foundations to the grade line and from that point upwards is of brick. The roof will be covered with felt and gravel. The contract was awarded to Messrs. Goldie & McCullough of Galt for two Sterling boilers 423 horsepower each, together with stokers to be installed in this boiler house.

Plans and specifications are also being prepared for steam heating, plumbing and electric wiring of the building, which will be out for tender at an early date.

Plans and specifications were prepared for a pump house to be erected on a site close to that of the new boiler house. This work was done under contract by Geo. C. Walker of Guelph, and the equipment for same supplied by the Layne Bowler Co.

Plans and specifications were prepared for building a poultry barn, which was erected by men employed by the College, the materials being purchased by tender.

Work was continued on the alterations and improvements in the Massey Library, which are nearing completion.

Horticultural Building.—Plans and specifications were prepared for a new building to be erected on the site adjoining the Apiary Building. Tenders were called for and the contract for general trades awarded to the E. P. Muntz Limited of Toronto, the contract for plumbing, heating and ventilating to Frederick Smith & Sons of Guelph, and the electric wiring to the Christie Electric Co., of Guelph. Work was commenced in July and fair progress is being made, under the supervision of Mr. C. B. Medley, Clerk of Works, who is also supervising the erection of the Administration Building.

The building is L shaped in plan and has a frontage on the northwest elevation of 139 feet and on the southwest elevation of 97 feet, and is of fireproof construction, three storeys in height, including the basement. The foundations are of concrete, faced with Queenston limestone from grade to moulded base.

From base to roof the walls are of red brick. The roof will be covered with blue slate, the cornice being of copper. All inside walls are built of brick and tile; the floors of tile and concrete. The quoins at angles of building and entrance porches, sills and key stones to windows and architrave and cornice to windows over entrances, are of Queenston stone tooled. This combination makes a very pleasing contrast.

On the first floor provision is made for offices and vaults for the director and staff and for two lecture rooms and draughting room. The building has two entrances in front with handsome portico with vestibule and steps leading to corridors of red tile. The floors of all corridors are tiled with red quarry tile. Iron stairways are located at each end of the corridor; a freight elevator being located in the centre with travel from the basement to attic. The building will be heated from the main boiler house.

In the basement provision is made for machinery and equipment with outside entrance to same wide enough to admit machinery to pass through. The rest of the space is given over to cold storage and refrigeration rooms, stores and baggage room. The main entrance to the basement is located at the southwest end of the corridor with stairways leading to the upper floors.

On the second floor provision is made for short course demonstration lecture room, three research laboratories, lecture rooms, library, photograph room and herbarium.

Fair progress has been made with the work and when completed this will be one of the finest buildings on the grounds.

Horticultural Experimental Station, Vineland Station.—Electric wiring and fixtures were installed in the greenhouses, work being done by electricians of this Department.

A double house was erected for labourers. Plans and specifications were prepared by this Department and materials purchased by tender. The work was carried out by men employed by the Superintendent assisted by farm labour, under a competent foreman. The cottages have been satisfactorily completed. Slight alterations and repairs were made to some of the buildings as required.

Western Ontario Experimental Farm, Ridgetown.—School building plans and specifications were prepared for an additional building connecting with the main building by a tunnel 8 feet wide by 114 feet long, walls being of brick and floor of tile. The building is 61 feet by 89 feet, two storeys in height, built of brick on concrete foundations. The ground floor is constructed of cement, the upper floors of wood, supported by steel columns and steel beams. The ground floor is divided into spaces for stock judging, manual training, store room, waiting room and offices with vault. Entrances are located at each end with staircases leading to the upper floor.

The upper floor is divided into four class-rooms with apparatus rooms adjoining, teacher's room and class-rooms. The contract for general trades was awarded to Warwick & Sons of Ridgetown, plumbing and heating to A. J. Silcox of Ridgetown and the electric wiring to L. A. Mason also of Ridgetown, under the supervision of Mr. A. T. Ward as Clerk of Works. Good progress is being made with the work.

Vimy Ridge Farm.—Late in 1928 the Department was notified by the Superintendent of the Farm, of the serious fire risk prevailing in the dormitories of the main building on account of the use of gasoline lamps for lighting. Following negotiations with the Hydro-Electric Power Commission, a power line was

installed from the Guelph city limits to the Farm property. The Commission were able to secure contracts for power from several farmers on the route and this made it possible for them to quote a rate per kilowatt hour, low enough to enable the Department to recommend the installation of a lighting system for the Farm. From the Farm boundary the Department made the installation of a pole line to the main building and barns, also wired the buildings; replaced gasoline motor drive for electric motor drive for water supply and installed a 5-horsepower motor in the cattle barn to perform the various cutting operations necessary for feeding the cattle. The installation has now been in service for some time and giving satisfaction.

Kemptville Agricultural School.—The addition to the residence for students was completed and furniture installed early in December.

Repairs were made to the other buildings as required.

PUBLIC INSTITUTIONS

The only structural work carried out by this Department in connection with the Institutions was the construction of a passenger elevator in the hospital building at the Ontario Hospital, London and the erection of an addition to the school house and the erection of a Gymnasium Building and swimming pool at the Boys' Training School, Bowmanville.

Plans and specifications were prepared for the buildings at Bowmanville, tenders called for and contract awarded for both buildings to T. E. Flaxman of Bowmanville for general trades; plumbing and heating of both buildings to W. L. Elliott of Bowmanville, and the electric wiring of the Gymnasium Building to Harris & Marson of Toronto. The electric wiring of the addition to the School Building was done by electricians in the employ of the Department.

The addition to the School Building is 56 feet by 96 feet, is one storey in height, containing four class-rooms with an auditorium with a capacity of 200, in the centre. Alterations were made to the interior of the original building, including the moving of the folding doors placed in the old auditorium, leaving a corridor leading to the auditorium and additional class-rooms. A change was made in the lavatory accommodation; new lavatories being constructed in the old building to serve both the old and new sections. The addition is a marked improvement to the appearance of the building.

The gymnasium and swimming pool cover an area of 79 feet by 88 feet. The gymnasium being 75 feet by 40 feet; the space occupied with swimming is 28 feet by 71 feet 6 inches, the swimming tank being 20 feet by 60 feet, the space between the two being occupied by an office for the Physical Instructor, property room, dressing room, shower baths and lavatory with side corridor; entrances being at each end of the corridor. The swimming pool, in addition to side lights, is lighted by a skylight in the roof. The pool is lined throughout with white tile with black markers. The filter room is located in the sub-basement, in which filter tank, heating tank and apparatus is installed, the water being heated from the central boiler house. Both the gymnasium and the swimming pool have been thoroughly equipped and up-to-date in every respect.

Both of these buildings will be heated from the central boiler plant. Underground cable was installed from the dining hall to both buildings for power and light, which was done by electricians of the Department.

Ontario Hospital, London.—Plans and specifications were prepared for a passenger elevator in this building and the contract awarded to the Otis Fensom

Elevator Co., of Toronto. The elevator has been installed and is working satisfactorily. Before it could be erected, it was necessary to make considerable change in the space allotted for an elevator, by building a pent house over same. This work was done by men employed by this Department.

DISTRICTS

The necessary repairs were made to the court houses, gaols, Registry Offices and Land Titles Offices throughout the Province, as were needed from time to time, the buildings having been inspected by the officials of the Department and furniture and furnished supplied as required.

Cochrane.—A sidewalk was laid in front of the court house, work being done by the town council under contract with the Government.

Manitoulin.—Electric light service and fixtures have been installed in the court house, gaol, gaoler's residence and Registry Office at Gore Bay to replace oil lamps. The work was done under contract by Milton W. Brett of Gore Bay.

Fort Frances.—An additional room has been fitted up in the attic space of the court house with staircase leading to same to provide accommodation for the Grand Jury. The work being done under contract by the J. East Co., of Fort Frances.

The old Registry Office has been repaired and will be fitted up with steel cells and will be handed over, I understand to the provincial police.

Temiskaming.—A lock-up has been erected at Englehart, built of brick, two storeys in height. The first floor consists of court room, magistrate's room, women's cell, lavatory and four steel cells for men, protected by steel grilles, as also the heating apparatus. The structural work was carried out by Hill-Clark, Francis, the steel cells and grilles by J. & J. Taylor Limited, of Toronto.

An addition has been built to the Mining Recorder's vault at Swastika, the work being done under contract by Van Rassel Bros., of Cochrane.

A mines rescue station was erected at Timmins under contract by Hill-Clark-Francis Limited of New Liskeard, which has been fully equipped and in operation for some time.

An addition was built to the lock-up at Gowganda, plans and specifications were prepared by this Department and the work carried out under men employed by the Forestry Branch.

Five men's steel cells and one double women's cell was supplied to the gaol at Kirkland Lake, together with corridor grilles and gates, and windows grilles, the work being done under contract by the J. & J. Taylor Limited of Toronto.

Plans and specifications were prepared for three new gaols located at Kenora, North Bay and Sudbury. These buildings are very similar in design, of fireproof construction, the walls being built of red brick on concrete foundations, floor and roof of tile and concrete construction with cornice of copper. In plan they embody the latest ideas in prison construction, particularly in regard to protecting the officials, the classification and segregation of prisoners. All bars to cells and grilles to guards' corridors will be of chrome steel. All brick and tile materials used in the construction of this building, as far as possible, have been manufactured at the Government clay plant, Mimico.

Kenora.—This building is two storeys in height and basement. The main or front of the building is 26 feet by 64 feet; the cell block in the rear is 50 feet by

40 feet. The main entrance is through the front of the main building to a corridor connecting with the cross corridor which runs the full length of the building, with two stairways leading to the gaol, one for men and the other for women, with one stairway leading to the basement. The gaoler's rooms and kitchen are located on either side of this centre corridor. The cell block is entered from the corridor on both sides and provision for twelve cells on each floor has been made, divided into groups of six to allow for proper segregation and classification, eighteen cells for men and six for women. Two special cells, guard's living room, matron's bedroom, toilets and linen rooms are located on the upper floor of the main building. Provision is made in the basement for laundry, prisoners' clothing, stores in front and for boiler room, fan room, coal vault, etc., in the rear. The buildings will be heated by steam. The contract for general trades has been awarded to Kelly & Kimberley of Kenora, plumbing and heating to H. O. Holden of Kenora, and electric wiring to H. Cheyne, of Kenora; steel cells and grilles to Canada Wire & Iron Goods Co., of Hamilton.

Sudbury.—The contract for general trades was awarded to the Duncan Construction Co., the plumbing, heating and ventilating to P. Morrison and the electric wiring to Harris & Marson of Toronto and steel cells and grilles to Messrs. J. & J. Taylor Limited of Toronto. The old gaol building will not be taken down until the new one is completed and ready for occupation. The new building will be erected on Government property to the west of the present gaol and will be heated from steam from the present boiler house, conveyed through a tunnel connecting the buildings. This building is divided into three sections, the main, or administrative building in the centre, and the cell blocks on each side connected by covered passages with the main building. The main entrance, through which all persons entering the building must pass, is of stone approached by a massive flight of stone steps and is located in the centre of the main building facing north with corridors leading to the main cross corridor. The front part of the main building is divided into gaoler's office, vault, matron's search room, officer's dining room with private stairs leading to second floor. The kitchen, pantry and stores are located in the rear portion of this section with main corridor from east to west. Cell blocks pass through this section with stairways to basement and upper floor. The front of the second floor in this section is divided into the doctor's room, treatment rooms, guards' rooms, toilets, etc. The cells for men are located on the first and second floors of the east cell block, and second floor of the west cell block, cells for women and juveniles being located on the first floor of the west block. Total of cells sixty-nine, including forty-nine cells for women, four isolation cells, two cells for insane, one special cell with guard's room, ten cells for women and three for juveniles. Special attention has been paid to the ventilation and sanitary appliances in this and the other gaols, all of which will be of the latest type of apparatus.

North Bay.—The contract for general trades for the Gaol Building has been awarded to R. Wallace & Sons of North Bay; heating and plumbing to J. M. McPherson of North Bay, and electric wiring to Percy Morrison of Sudbury; steel cells and grilles to Canada Wire & Iron Goods Co., of Hamilton. This building is somewhat similar in design to that of Sudbury, with the exception that it has only one cell block, with accommodation for sixteen men on each floor, nine cells for women being located in the rear of the main building; four hospital cells for men and three cells for juveniles. Kitchen stores, cold storage, boiler and fan room, laundry sterilizer room and clothing room for men being located in the basement of the main building. The total accommodation,

including cells for men, women and juveniles is forty-eight. This building has been erected on a site on Trout Creek Road, purchased by the City of North Bay.

Miscellaneous.—The Labour Employment Office was moved in August from 45 Front Street West to 79 Adelaide Street East. This building has been altered by the owners from plans made by this Department, to suit their requirements.

Ontario Government Building, Exhibition Park, Toronto.—About the usual amount of work was done by this Department preparing and installing exhibits, electric lighting and repairs generally. A contract was awarded to Douglas Bros., of Toronto for covering the flats of the cornice and copings of parapets to prevent the stone from disintegrating. The work has been satisfactorily completed.

All of which is respectfully submitted.

I have the honour to be

Sir,

Your obedient servant,

F. R. HEAKES,

Architect.

Toronto, October 31st, 1929.

HONOURABLE GEORGE S. HENRY,

Minister of Public Works and Highways.

SIR,—

I have the honour to report on the work of the Engineer's Branch of the Department of Public Works for the year ending October 31st, 1929.

The expenditure on new work amounted to \$124,835.58 and the expenditure on maintenance, including the operation of the provincial dredge amounted to \$26,535.58.

During the year, 103 bridges were constructed, forty-nine of reinforced concrete, five steel spans on concrete abutments and forty-nine timber bridges.

The provincial dredge was occupied during the season in the improvement of the navigation channels below the locks at Port Carling and above the Narrows at Port Sandfield.

Two storage dams were built, the Raven Lake dam on the head waters of the Black River and the Port Sydney dam on the North Branch of the Muskoka River. Two dams were under construction at the end of the season on the upper waters of the South Branch of the Black River, the Trout Lake dam and the Rainy Lake dam, both in the Township of Longford.

The lockmasters' reports on the traffic through the different locks under the control of this Department were as follows:

	Steamers	Small Boats	Scows	Rafts
Port Carling.....	1,865	951	470	111
Magnetawan.....	326	81	120	376
Huntsville.....	228	580	36	720

The municipal drainage work in the different districts, carried out under the direction of this Department, amounted to \$40,328.74. The season was favourable for such work and the projected work was fully completed.

Under the Provincial Aid to Drainage Act, fourteen large municipal drainage schemes were examined and reported on. The largest of these was the Beaudette River drain in the Townships of Charlottenburg and Lancaster in Glengarry, on which the expenditure amounted to \$97,097.64.

The expenditure from the maintenance fund was again small. The large bridges under the control of the Department have been nearly all rebuilt as permanent structures of steel and concrete. The bridge work now is largely reconstructing small timber bridges. The classified expenditure from this fund is as follows:

MAINTENANCE EXPENDITURE IN 1929

General, tools, repairs, equipment, etc.	\$2,007 06	
Maintenance and operation of Provincial dredge.....	9,797 44	
Operation of storehouse at Bracebridge.....	25 00	
Clearing navigation channels.....	331 25	
Painting bridges.....	443 99	
		<u>\$12,604 74</u>

REPAIRS AND LIGHTING LOCKS AND SWING BRIDGES

Port Carling lock and swing bridge.....	\$329 99	
Magnetawan lock and swing bridge.....	3,385 89	
Huntsville lock.....	115 13	
Huntsville swing bridge.....	304 99	
Ryerson swing bridge.....	126 16	
Port Sandfield swing bridge.....	566 71	
Indian Point swing bridge.....	466 04	
		<u>\$5,294 91</u>

REPAIRS TO DAMS

Baysville dam.....	\$6 16	
Deer Lake dam.....	483 78	
Kearney dam.....	200 00	
Rama Canal dam.....	1,258 09	
		<u>\$1,948 03</u>

REPAIRS TO BRIDGES

Nipissing Bridges

Graham Creek bridge, lot 13, con. 10, Chisholm.....	\$212 61	
Lavasse Creek bridge, Ferris.....	58 50	
Page Creek bridge, lot 17, con. 12, Ferris.....	68 66	
Poverty Creek bridge, lot 9, con. 5, Airy.....	156 75	
Thibault Creek bridge, lot 25, con. 10, Ferris.....	65 72	
		<u>\$562 24</u>

Parry Sound Bridges

Beatty Creek bridge, Nipissing.....	\$204 28	
Bell Settlement bridge, Croft.....	105 47	
Bear Creek bridge.....	66 96	
Beaver Lake bridge, Bethune.....	93 02	
Blackstone bridge, Conger.....	51 04	
Commanda Creek bridge, Pringle.....	513 41	
Commanda Creek bridge, Lount.....	191 99	
Croft bridge, lot 30, con. 13.....	49 25	
Deer Creek bridge, Ferris.....	38 00	
Eagle Lake bridge, Machar.....	143 89	
Kent bridge, Strong.....	397 42	
Smith Creek bridge, Mills.....	227 75	
Whitestone bridge, Hagerman.....	632 04	
		<u>\$2,714 52</u>

Muskoka Bridges

Bala bridge.....	\$101 62	
Chapman Mills bridge, Draper.....	118 59	
East Creek bridge, Oakley.....	115 52	
Housey's Rapids bridge, Ryde.....	316 65	
Vankoughnet bridge, Oakley.....	178 13	
		<u>\$830 51</u>

Centre Simcoe Bridges

Fourth Line bridge, Tiny.....	\$72 00	
Waubashene bridge, Tay.....	299 95	
		<u>\$371 95</u>

Haliburton Bridges

Conway bridge, Snowdon.....	\$35 90	
Irondale bridge, Snowdon.....	291 25	
Maple Lake bridge, Stanhope.....	44 48	
Minden Mills bridge, Minden.....	51 58	
Monck Road bridge, lot 7, con. 7, Laxton.....	57 90	
		<u>\$481 11</u>

North Hastings Bridges

Childs Mine bridge, Mayo.....	\$135 78	
Float bridge, Mayo.....	377 00	
Russell Creek bridge, Dungannon.....	199 50	
		\$712 28

Addington, Frontenac Bridges

Mud Creek bridge, Portland.....	\$323 03	
Sharbot Lake bridge, Oso.....	71 83	
		\$394 86

Renfrew Bridges

Calabogie bridge.....	\$122 29	
Combermere bridge.....	270 29	
Griffith Road bridge, Grattan.....	64 26	
Hodgins Creek bridge, Admaston.....	130 64	
Hurd Creek bridge, Bagot.....	124 00	
Indian River bridge, Alice.....	60 00	
McGarry bridge, Raglan.....	50 50	
Moore Creek bridge, Admaston.....	100 00	
Opeongo bridge, Brougham.....	56 10	
Rockingham Creek bridge.....	99 50	
		\$1,077 58

MUNICIPAL BRIDGES

NIPISSING BRIDGES

Bastien Creek Bridge, Lot 13, Con. 12, Cameron.—A timber bridge with a clear span of 9 feet. Timber crib abutments, stone-filled, flatted stringers, plank floor. Approaches graded and strong guard rail in place. Cost, \$373.20.

Boom Creek Bridge, Lot 9, Con. 10, Papineau.—A timber bridge with a clear span of 20 feet, 16-foot roadway. Timber crib abutments, stringers and floor flatted cedar. Cost, \$566.08.

Booth Road Bridge, Wassa Creek, Lot 29, Con. 5, Papineau.—A timber bridge, with a clear span of 10 feet, timber crib abutments, 9 feet in height, stone-filled. Deck of flatted cedar. Approaches stone-filled, top dressed with gravel. Strong guard rails over bridge and fill. Cost, \$757.22.

Calvin-Lauder Townline Bridges, Lot 36, Sparks Creek.—Two timber bridges of 10 feet clear span. Timber crib abutments, hewn cedar, stone-filled. Stringers and floor flatted cedar. Cost, \$546.62.

Deschamps Creek Bridge, Lot 1, Con. 1, East Ferris.—A timber bridge with a clear span of 10 feet. Timber crib abutments, stone-filled. The deck is of flatted cedar. The west approach is 150 feet in length and the east approach 140 feet, is filled with stone an average height of 2½ feet, and top-dressed with gravel. Cost, \$559.35.

Graham Creek Bridge, Lot 13, Con. 10, Chisholm.—A new deck of flatted cedar stringers, floor and railing was placed on this bridge and the approaches were built up of stone and top-dressed with gravel. Cost, \$345.75.

Hearl Creek Bridge, Lot 25, Con. 8, Papineau.—A timber bridge with a clear span of 8 feet. Timber crib abutments, stone-filled. Flatted cedar stringers with 3-inch plank floor. Cost, \$284.31.

L'Amable Creek Bridge, Lot 31, Con. 2, Airy.—A timber bridge with two spans of 20 feet each. The abutments and centre pier are timber cribs 16 feet long, 6 feet wide and from 6 to 8 feet in height. The cribs are stone-filled. The stringers are flatted timber 8 inches by 10 inches and the floor is 3-inch plank. A strong guard rail is placed on each side of bridge. The approaches are filled with rock. The east approach is 76 feet long and the west is 55 feet long. Heavy stone retaining walls from 2 to 8 feet in height are built up on each side of the approaches and 22 feet apart. The roadway between is filled with gravel to a level one foot above the walls. Wire cable guard rails are in place on each side of the fill. Cost, \$2,174.00.

Levesque Creek Bridge, Lot 18, Chisholm-Ferris Townline.—A timber deck bridge with rubble masonry abutments. The span is 8 feet clear and the roadway 16 feet in width. The stringers are flatted cedar and the floor is 3-inch red pine plank. Strong guard rails are provided. Cost, \$544.46.

Sproule River and Opeongo Road Bridges, Sproule.—The Sproule River bridge is a timber bridge with a clear span of 20 feet. Timber crib abutments stone-filled, flatted stringers and corbels, with a 3-inch red pine floor. Strong guard rails are provided on bridge and approaches. In this vicinity, seven bridges on the Opeongo Road were overhauled and fully repaired. New decks were provided where necessary and the approaches were properly repaired to make the road safe for travel.

Whitewater Creek Bridge, Lot 28, Con. 2, Bonfield.—A reinforced concrete box culvert, 5 feet wide and 4 feet high, inside measurement. The culvert is 32 feet long, with wing walls 11 feet in length at each corner. Cost, \$762.95.

Whitewater Creek Bridge, Lot 18, 13th Line, Chisholm.—A timber bridge with a clear span of 20 feet. Timber crib abutments stone-filled. Stringers and floor flatted cedar. Cost, \$628.41.

The work in the Nipissing District was done under the direction of J. O. Rochefort, Road Inspector.

PARRY SOUND BRIDGES

Barrett Creek Bridge, Lot 30, 7th Line, Gurd.—A concrete beam bridge with a clear span of 14 feet. Roadway 16 feet clear. J. R. Harrop was foreman in charge.

Bear Creek Bridge, Nipissing-Himsworth Townline.—A timber bridge with a clear span of 20 feet. The abutments are cedar timber cribs, stone-filled. Six lines of flatted cedar stringers with 3-inch hemlock floor. T. J. Paget was foreman in charge. Cost, \$542.44.

Black Creek Bridge, Lot 14, 3rd Line, Gurd.—A timber bridge with a clear span of 20 feet. Roadway 14 feet in clear width. The abutments are timber cribs, stone-filled. Five lines of flatted pine stringers, carry a 3-inch hemlock plank floor. J. R. Harrop was foreman in charge. Cost, \$605.23.

Boller Creek Bridge, Lot 15, 23rd Line, Himsworth.—A concrete beam bridge with a clear span of 20 feet. Roadway 16 feet. J. R. Harrop, foreman in charge. Cost, \$2,349.20.

Cascade Bridge in the Town of Parry Sound.—In the spring of 1928, a section of the Parry Sound dam went out with the flood. The Cascade bridge is imme-

diately below the dam. The flood released by the broken dam carried away a portion of the extensive fill at the west end of the Cascade bridge. The town was obliged to restore the roadway and to guard against further disaster; it was decided to place a concrete bridge in the fill. A bridge with a clear span of 40 feet was provided. The Department made a grant of \$3,000 towards the cost of the work which amounted to about \$6,000.

Kearney Bridge, Lot 2, Cons. 10 and 11, Bethune.—A concrete beam bridge with a clear span of 20 feet and a roadway 16 feet in clear width. The abutments are 10 feet in height to floor level. Cable guards provided. J. R. Harrop was foreman in charge. Cost, \$2,123.41.

Midlothian Bridge, Lot 20, Con. 9, Ryerson.—A concrete beam bridge with a clear span of 20 feet and roadway 16 feet in clear width. Wire cable guard rail in place. Foreman, T. J. Paget. Cost, \$1,333.94.

Side Line Bridge, Lots 25 and 26, Con. 19, Himsworth.—A timber bridge over Bear Creek with a clear span of 18 feet and roadway 16 feet clear. Timber crib abutments, flatted cedar stringers. Floor, 3-inch hemlock plank. Foreman, T. J. Paget. Cost, \$284.19.

Wolf River Bridge, Lot 27, Con. 2, Hardy.—A concrete and steel beam bridge with a clear span of 37 feet and roadway 16 feet in clear width. The abutments and floor are of concrete. The site was changed to secure rock foundations. The abutments are of concrete and are 10 feet in height to floor level. The steel deck consists of two-side girders 26 inches deep at 90 pounds per foot, joined by two 18-inch floor beams. Five lines of 9-inch steel floor joist support the 6-inch concrete floor slab. The floor slab is reinforced with 3-10-20 expanded metal. Steel posts support the cable guard rail which extends over bridge and approaches. Extensive fills were required at the ends of the bridge. These fills consist of rock top-dressed with gravel. The steel deck was supplied by McGregor & McIntyre for \$710.00. J. R. Harrop was foreman in charge. Cost, \$6,437.47.

MUSKOKA BRIDGES

Baker Creek Bridge, Lots 13 and 14, Con. 7, Macaulay.—A concrete bridge with a clear span of 12 feet and a roadway 24 feet in clear width. The abutments are 8 feet in height to the floor level. Steel posts support cable guards which extend over bridge and approaches. Cost, \$1,123.41.

Echo Creek Bridge, Lot 23, Con. 14, Oakley.—A timber bridge with a clear span 14 feet and roadway 16 feet in clear width. The abutments are timber cribs, rock-filled. 12 inches by 12 inches carry a 3-inch plank floor. The approaches are filled and guard railings extend over bridge and approaches. Cost, \$275.71.

Hanes Creek Bridge, Lot 10, Con. 2, Chaffey.—A 48-inch metal pipe, 26 feet in length replaces a small stone culvert too small for the waterway. Cost, complete, \$331.83.

Jackson Creek Bridge, Lot 30, Con. 7, Macaulay.—A concrete bridge with a clear span of 10 feet and roadway 20 feet in clear width. Steel posts support the cable guards which extend over bridge and fill. Cost, \$1,229.25.

Jenner Creek Bridge, Lot 31, Con. 7, Stephenson.—A concrete bridge with a clear span of 10 feet and roadway of 16 feet. It has a 12-inch floor slab, steel rail posts and cable guard rails. Cost, \$681.43.

Little East Bridge, Lot 18, Con. 10, Chaffey.—This bridge was repaired by filling the crib abutments with rock. The deck was light for the traffic. Steel beams were placed under the wheel tracks and a new stringer placed between the steel beams and a new stringer was placed outside each steel beam. A new plank floor and new railing was supplied. Cost, \$333.55.

Matthiasville Bridge, South Branch, Draper.—The old steel span on this bridge was too light for the traffic and was replaced with a heavier steel span sufficient for the requirements of the present and prospective traffic. The old bridge had a 14-foot roadway and the abutments were extended to accommodate the new steel which provides a 16-foot roadway. The steel was supplied by the Hamilton Bridge Co. for \$1,920.00. All work in connection with the bridge, including erection of steel and laying the concrete floor, was done by the Department. Cost, \$3,610.57.

Morrison Culvert, Lot 25, Con. 5.—This work consisted of replacing a wooden bridge with a metal culvert pipe. The pipe is 36 inches in diameter and 24 feet long. Stone collars are provided at each end of the pipe and the road properly graded. Cost, \$197.72.

Townline Bridge, Lot 8, Monck & Watt.—A concrete bridge with a clear span of 12 feet and roadway 16 feet in clear width. The abutments are 12 feet 6 inches in height to the floor level. The floor is a 12-inch slab, reinforced with $\frac{3}{4}$ -inch steel. Steel railing posts support wire cable guards which extend over bridge and approaches, a length of 54 feet. Cost, \$1,070.29.

All the Muskoka work was done under the direction of Wm. Lowe, supervising foreman.

EAST SIMCOE BRIDGES

Fourth Con. Bridge, Purbrook Creek, Lot 14, Orillia.—A concrete beam bridge on concrete pile abutments. The bridge has a clear span of 25 feet with a roadway 16 feet in clear width. A bent of four concrete piles supports each end of the bridge. Four concrete beams 12 inches in width and 24 inches deep carry a 6-inch concrete floor slab. The railings are concrete slabs, each supported by four main posts, 12 inches by 12 inches in section. The approaches are rock-filled, the rock being allowed to fall to a natural slope around the piles. The concrete piles are 25 feet long and are reinforced with $\frac{3}{4}$ -inch square steel bars.

Purbrook Creek Bridge, Lots 15 and 16 Sideline, Con. 4, Orillia.—This bridge, a short distance up-stream from the Fourth Con. Bridge, is the same size and follows the same construction as the Fourth Con. bridge above described. Cost of the two bridges, \$2,603.02.

Hobart Bridge, Lot 7 on 7th Line, Medonte.—A concrete bridge with a clear span of 12 feet and roadway 16 feet in clear width. The floor is a 12-inch concrete slab reinforced with $\frac{3}{4}$ -inch square steel bars. Steel rail posts support the wire cable guard, which extends over bridge and approaches, a length of 50 feet. Cost, \$1,501.89.

Parham Bridge, North River, Lot 3, 14th Line, Tay.—A steel bridge on concrete abutments. It consists of a 56-foot pin-connected truss and a 29-foot

rivetted truss. The roadway is 14 feet clear. To provide for navigation for small craft, the bridge has a clearance of 8 feet. The abutment and pier for the large span are built in water 5 feet deep. Timber cribs 32 feet by 12 feet are built up to low water level and filled with stone. Concrete piers are built up from low water level to the bridge seat. These piers are 5 feet at the base and 3 feet wide at the top. The shore pier supporting the short span is 6 feet wide at the base and 3 feet wide at the bridge seat. The floor of the bridge is timber, 3 inches by 12 inches floor joist and 3-inch plank floor. The grading of the approaches was done by the Township of Tay. The long steel span was secured from the old Atherley bridge and the short span from the dismantled bridge at Sharbot Lake. Cost to the Department, \$3,243.03.

Reids Bridge, Lot 1, 9th Line, Medonte.—A concrete bridge with a clear span of 12 feet and a roadway 16 feet in clear width. The abutments are 8 feet 6 inches in height to floor level. The floor is a 12-inch concrete slab, reinforced with $\frac{3}{4}$ -inch square steel bars. Steel rail posts support the wire cable guards which extend over bridge and fill a distance of 50 feet. Cost, \$1,362.10.

NORTH ONTARIO BRIDGES

Boyd's Bridge, Lots 12 and 13, Lake Shore Range, Rama.—A concrete bridge with a clear span of 15 feet and roadway 16 feet in clear width. The abutments are 10 feet in height to floor level. The floor is a 15-inch slab, reinforced with $\frac{3}{4}$ -inch square steel bars. Steel railing posts support the wire cable guards which extend over bridge and fill, a distance of 75 feet. Cost, \$1,396.71.

HALIBURTON BRIDGES

Bull Creek Bridge, Lot 9, Minden-Stanhope Townline.—A concrete beam bridge with a clear span of 30 feet and roadway 16 feet in clear width. The abutments are 15 feet in height to floor level. Concrete slab railing supported by six 12-inch by 12-inch posts. Wire cable guards on approaches 25 feet at each end of bridge. Cost, \$1,925.73.

Dark Lake Bridge, Lot 1, Con. 22, Cardiff.—Located over the narrows between Dark Lake and Grace Lake. A concrete beam bridge supported by concrete piles. It has a clear span of 30 feet with roadway 16 feet in clear width. Navigation for small craft had to be provided for and a clearance of 5 feet above high water level was provided. Four concrete piles are driven to low water level at each end. Twenty-inch curtain walls are built up from the heads of the piles to the bottom of the deck. The floor is a 14-inch concrete slab, reinforced with $\frac{3}{4}$ -inch square steel bars. The floor is supported by girder beams on each side. The girders are 4 feet 6 inches deep and 12 inches in width, reinforced with 1-inch square steel bars. The bottom of the girder is flush with the bottom of the floor. The upper part of the girder serves as a guard rail. Very extensive rock fills were required to build up the approaches. Wire cable guards 48 feet in length are provided at each end of the bridge. Cost, \$2,596.14.

Fifth Con. Bridge, Lot 15, Eldon.—This work consisted of the placing of a metal culvert pipe 48 inches in diameter and 20 feet long. A stone collar is placed at each end of pipe and the road properly graded. Cost, \$208.35.

Head River Bridge, Lot 33, Con. 2, Digby.—A concrete beam bridge with a clear span of 25 feet and a roadway 16 feet in clear width. One end of the bridge rests on a concrete abutment 12 feet in height to floor level. As the other

abutment would require very deep excavation to reach the rock, concrete piles were substituted. The railings are concrete slabs, each supported by four main posts and an extensive rock fill is placed at each end of the bridge. Cost, \$1,943.48.

Hill Bridge, Head River, Lot 28, Con. 2, Dalton.—A steel bridge on concrete pile piers, with concrete trestle approaches. The steel span is 68 feet long in the clear and the trestle approaches are each 20 feet in clear length. The roadway is 16 feet in clear width. The pile piers supporting the steel consist of double rows of concrete piles, driven to rock. The bridge seat 7 feet in height and 4 feet wide, is built up from the heads of the piles. The trestle beams are supported on the shore end on concrete piles. The beams, four in line, are 12 inches wide and 18 inches deep, reinforced with 1-inch square steel bars. The floor throughout is a 6-inch concrete slab, reinforced with expanded metal. The steel span was supplied by the Dominion Bridge Co. at a contract price of \$2,472.73. All work in connection with the bridge, including the erection of the steel, was done under the direction of the Department's foreman. Cost, \$6,170.32.

Ninth Con. Bridge, Lot 11, Con. 9, Carden.—A concrete bridge with a clear span of 16 feet and a roadway 16 feet in clear width. Cost, \$606.49.

Perch Creek Bridge, Lot 1, Con. 5, Laxton.—A concrete bridge with a clear span of 11 feet and roadway 16 feet clear. Cost, \$595.49.

Second Con. Bridge, Lot 1, Carden.—A concrete bridge with a clear span of 11 feet and roadway 16 feet in clear width. Cost, \$771.64.

Wilberforce Bridge, Lot 34, Con. 16, Monmouth.—A concrete bridge with a clear span of 12 feet and roadway 16 feet in clear width. Steel posts carry the cable guards which extend over bridge and approaches, a distance of 75 feet. Cost, \$1,343.17.

All the work in the Haliburton District was done under the direction of P. R. Switzer, Public Works Foreman.

NORTH HASTINGS BRIDGES

Backwater Bridge, Papineau Creek, Con. 1, Wicklow & McClure.—This work consisted of an extensive fill and the placing of a 12-inch metal culvert pipe 32 feet long. Wire cable guards were placed at each side of the fill over a length of 340 feet. Cost, \$440.43.

Boundary Bridge, Lot 1, Con. 1, Carlow.—A concrete bridge with a clear span of 8 feet, roadway 16 feet clear. Steel railing posts support wire cable guards which extend over bridge and fill a length of 50 feet. Cost, \$701.77.

Davidson Bridge, Lot 29, Con. 3, Tudor.—A concrete bridge, span 8 feet, roadway 16 feet. Rock foundation, wire cable guards. Steel railing posts. Cost, \$596.54.

Diamond Lake Bridge, Lot 34, Con. 4, Herschel.—A timber bridge with a clear span of 35 feet. Cost, \$376.00.

Flatted Bridge on boundary of Wicklow and McClure.—This bridge is located over Papineau Creek. It is a concrete beam structure with a clear span of 40 feet, roadway 16 feet in clear width. Cost, \$3,402.78.

Fitzpatrick Bridge, Lots 11 and 12, Con. 7, Marmora.—A concrete beam bridge with a clear span of 20 feet, roadway 16 feet clear. The abutments are 9 feet in height to floor level. Steel posts support the wire cable guards which extend over bridge and fill a length of 70 feet. Cost, \$896.30.

Glennie Bridge, Lot 20, Con. 6, Tudor.—A timber bridge with a clear span of 10 feet 6 inches, roadway 16 feet. Cost, \$351.05.

Government Bridge, Lot 15, Con. 10, Wollaston. A timber bridge with a clear span of 11 feet and 16 feet roadway. Cost, \$267.84.

Irwin Bridge, Lots 15 and 16, Con. 7, Madoc.—A concrete bridge with a clear span of 12 feet and roadway 16 feet clear. Abutments 7 feet in height to floor level. Steel posts, wire cable guards over bridge and approaches a length of 72 feet. Cost, \$604.07.

Malone Swamp Bridge, Lot 18, 11th Line, Marmora.—A concrete bridge with a clear span of 15 feet and roadway 16 feet clear. Abutments 10 feet in height to floor level. Floor slab 15 inches thick and reinforced with $\frac{3}{4}$ -inch square steel bars. Steel railing posts and wire cable guards over bridge and fill a length of 76 feet. Cost, \$896.30.

McDonald Bridge, Maxwells Creek, Lot 70, Hastings Road, Dungannon.—A concrete bridge with a clear span of 8 feet and roadway 20 feet clear. Steel railing posts and wire cable guards over bridge and approaches a length of 48 feet. Cost, \$912.98.

Reiss Bridge, McGarry Creek, Lot 12, Con. 12, Herschel.—A double span timber bridge, each span 20 feet clear, roadway 16 feet clear. Cost, \$553.50.

Ross Bridge, Lots 5 and 6 Con. 6, Madoc.—A concrete bridge with a clear span of 12 feet and roadway 16 feet clear. Steel posts, wire cable guards over bridge and approaches a length of 70 feet. Cost, \$513.35.

Ryan Road Bridge, Lot 6, Con. 16, Carlow.—A timber bridge with a 16-foot span and 16-foot roadway. Cost, \$206.25.

St. Ola Bridge, Lot 2, Con. 9, Limerick.—A timber bridge over Beaver Creek. The bridge has three spans of 16 feet, and a total length of 56 feet. Roadway 16 feet. An entire new timber deck, stringers, floor and railing were placed on the bridge. The old concrete abutments and piers are in good condition. Cost of new deck, \$509.82.

All the bridge work in North Hastings was done under the direction of W. E. Wiggins, Supervising Foreman.

EAST HASTINGS BRIDGES

Burk's Bridge, Lot 10, 5th Line, Huntingdon.—A concrete bridge, span 12 feet, roadway 16 feet. Steel posts support the wire cable guards which extend over bridge and fill a length of 70 feet. Cost, \$646.56.

Gowdies Bridge, Lots 11 and 12, Con. 5, Huntingdon.—A concrete bridge, span 15 feet, roadway 16 feet. Steel posts and wire cable guards over bridge and approaches a length of 71 feet.

Young's Bridge, Claire River, Lots 24 and 25, Con. 10, Hungerford.—A 60-foot steel span on concrete pile piers, with a 15-foot concrete trestle approach at each end. Roadway 16 feet clear. The concrete pile pier supporting the steel consists

of a double row of piles 14 feet long, driven to low water level. A bridge seat 4 feet wide and 6 feet in height is built up from the head of the piles. The 18-inch trestle beams, four lines, are supported on the shore end by concrete piles. The floor slab of concrete 6 inches thick, is reinforced with expanded metal. The approaches are filled with rock, which is allowed to fall to a natural slope around the shore piles. The steel span was supplied by the Standard Steel Construction Co. for \$1,700. All work in connection with the bridge, including the erection of the steel, was done by day labour under Public Works foreman. Total cost, \$4,335.48.

The bridge work in East Hastings was done under the direction of W. E. Wiggins, Supervising Foreman.

ADDINGTON-FRONTENAC BRIDGES

Beaver Creek Bridge, Glastenbury, Lot 26, Con. 10, Kaladar.—A concrete beam bridge with a clear span of 25 feet, roadway 16 feet in clear width. The abutments are 9 feet in height to floor level. The railing is a concrete slab supported by five concrete posts, 12-inch by 12-inch in section. Wire cable guards on approaches. Cost, \$2,820.57.

Buckshot Creek Bridge, Lot 40, N.E.R., Clarendon.—A concrete beam bridge with a clear span of 20 feet and roadway 16 feet in clear width. The abutments are 9 feet in height to floor level. Steel posts carry the wire cable guards which extend over bridge and approaches a length of 84 feet. Cost, \$1,647.31.

Bush Bridge, Depot Creek, Lot 4, Con. 8, Hinchinbrooke.—This work consisted of extending the length of the old concrete abutments and placing a new concrete deck on the bridge. The span is 15 feet and the roadway 16 feet in clear width. In the east approach to the bridge, there was a dangerous curve on a steep grade. To remedy this, a heavy ledge of rock was blasted out to reduce the curve and the rock was used to bring the approach to a uniform grade between the hill and the bridge. Extensive wire cable guards, 356 feet in all, were placed on the approaches. Total cost, \$2,698.50.

Buttermilk Falls Bridge, Lot 24, Con. 5, Barrie.—A concrete bridge with a clear span of 8 feet, roadway 16 feet in clear width. Cost, \$502.97.

Hydes Creek Bridge, Lot 4, Con. 15, Denbigh.—A concrete girder bridge with a clear span of 40 feet and roadway 16 feet in clear width. The abutments are 10 feet in height to the floor level. The deck consists of two main girders 12 inches wide and 6 feet deep, reinforced with 1-inch square steel bars. The 8-inch floor slab is supported by two floor beams and two stringer beams. The girders serve as guard rails as they extend $4\frac{1}{2}$ feet above the floor level. Wire cable guards extend over the approaches. Cost of bridge, \$3,156.34.

Loughborough Bridge, Lots 2 and 3, Con. 5.—A concrete beam bridge with a clear span of 20 feet and roadway 16 feet in clear width. Steel posts support the wire cable guards which extend over bridge and fill a length of 85 feet. Cost, \$1,970.93.

Vardy Creek Bridge, Camden-Portland Townline.—A concrete bridge with a clear span of 12 feet and a roadway 16 feet in clear width. Steel posts support the wire cable guards which extend over bridge and approaches. In connection with this bridge, a short distance to the south of it, a 24-inch metal culvert pipe 20 feet long was placed across the road in a swale, to relieve a section of the road from flooding. Cost of bridge and pipe, \$1,071.14.

Wolf Swamp Bridge, Cameron Creek, Lots 18 and 19, Con. 9, Hinchinbrooke.—A steel girder bridge with a clear span of 37 feet and roadway 16 feet in clear width. The two main girders are 26-inch steel beams at 90 pounds per foot. Two 18-inch floor beams support four lines of 9-inch steel floor joist. For abutments, a stone fill was put in and a timber crib was placed on the fill. The crib was filled with stone to low water level. Concrete bridge seats were built up 4 feet in height from the top of the cribs. Steel posts carry the wire cable guards.

The approaches are very extensive works. The open channel is 80 feet wide with a very soft bottom. On the south end the land is subject to flooding for a distance of 1,200 feet and on the north end the flooding extends 3,500 feet from the channel. The road grade had to be widened and raised. A large quantity of rock was required to fill in the open section of the old channel. Steel posts support the wire cable guards which extend over bridge and approaches. The steel superstructure was supplied by the Dominion Bridge Co. for \$712.00. Total cost of bridge and approaches, \$6,939.48.

All the bridge work in this District was done under the direction of W. W. Pringle, Supervising Foreman.

SOUTH RENFREW BRIDGES

Bark Lake Bridge, Barry's Bay, Madawaska Road, Jones.—A steel beam deck on cedar timber abutments and flatted cedar floor. The span is 18 feet clear and the roadway 16 feet in clear width. The steel deck consists of seven lines of 12-inch I-beams at 35 pounds per foot. Steel rail posts support the wire cable guards which extend over bridge and filled approaches a length of 65 feet. Cost \$875.88.

Black Bay Bridge, Lot 18, Con. 1, Bagot.—This work consisted of an extensive fill across an arm of Calabogie Lake and the placing of a metal culvert pipe 5 feet in diameter for drainage. The fill is 1,406 feet in length, from 2 to 6 feet in height and has a top width of 21 feet. Two thousand two hundred cubic yards of stone and 775 cubic yards of earth and gravel were placed in the fill. Wire cable guards are in place on each side of the fill. Cost, \$4,125.11.

Collins Creek Bridge, Lot 8, Con. 14, Admaston.—A metal pipe culvert 36 inches in diameter and 30 feet in length, with an earth fill 300 feet long, having an average height of 5 feet. Guard rails in place over full length of approaches. Cost, \$625.83.

Cottage Road Bridge, Lot 8, Con. 9, Radcliffe.—A 20-inch metal pipe culvert 24 feet long. The fill is 60 feet long, 16 feet wide on top, with height from 2 to 7 feet. Wire cable guards extend over full length of fill. Cost, \$186.81.

Eganville Road Bridge, Lot 290, Opeongo Range, Brudenell.—A 12-inch metal pipe culvert, 26 feet in length with fill 25 feet long of an average height of 3 feet. Cost, \$135.90.

Gulick Creek Bridge, Lot 27, Con. 6, Raglan.—Work consisted of placing a new cedar deck on old stone abutments. Cost, \$100.00.

Grassy Bay Bridge, Lot 11, Con. 12, Bagot.—A timber bridge with a clear span of 24 feet, roadway 16 feet. The filled approaches are 235 feet long. Five hundred and seventy yards of stone and earth were placed in the approaches. Timber guard rails over full length of approaches. Cost, \$751.47.

Green Creek Bridge, Lot 34, Con. 5, Sherwood.—A cedar timber bridge with a clear span of 16 feet and roadway 16 feet in clear width. Timber crib abutments filled with stone. Cost, \$255.50.

Hodgins Creek Bridge, Lot 20, Con. 1, Admaston.—A timber bridge with a clear span of 6 feet 6 inches. Roadway 20 feet clear. Approaches filled 125 feet in length. Cost, \$276.03.

Lidke Creek Bridge, Lot 29, Con. 2, Raglan.—A timber bridge with a clear span of 10 feet 6 inches and roadway 16 feet clear. Approaches filled over a length of 55 feet. Cost, \$361.51.

Little Madawaska Bridge, Lot 10, Con. 11, Sherwood.—A timber bridge, span 12 feet, roadway 16 feet. Cedar timber abutments, stone-filled. Cost, \$361.51.

Little Madawaska Bridge, Lot 22, Con. 8, Sherwood.—A cedar timber bridge, span 12 feet and roadway 16 feet. Crib abutments, stone-filled. Cost, \$399.55.

Kiely Creek Bridge, Lot 10, Con. 13, Admaston.—A timber deck on stone abutments, span 10 feet, roadway 20 feet. Approaches filled with stone over a length of 220 feet. Cost, \$301.05.

Killaloe Bridge, Hagarty.—This work consisted of placing a sidewalk on the east side of the bridge. The old bridge is a concrete structure with a 30-foot span and an 18-foot roadway. Provision had to be made for pedestrian traffic. The new sidewalk is 5 feet in clear width and is supported on the outside by a concrete beam 12 inches wide and 30 inches deep, reinforced with 1-inch square steel bars. The 6-inch sidewalk slab is reinforced with expanded metal. A concrete spindle railing similar to the railing on the old bridge was provided on the outside of the walk. The approaches were widened to provide for the extension of the sidewalk. Cost, \$500.66.

Old Killaloe Bridge, Hagarty.—The old concrete bridge over Brennan's Creek in the Village of Old Killaloe, constructed in 1923, with a 14-foot roadway, had proven entirely too narrow for present-day traffic. It was decided to widen the bridge to a clear width of 20 feet. The old bridge comprised two spans of 20 feet each. The old abutments and pier were extended on the north end to provide for the extra width. The north railing was cut away and a seat 6 inches wide and 6 inches deep was cut from the old floor to provide a seat for the new section. Two new concrete beams reinforced with 1-inch square steel bars, were placed under the new 6-inch floor slab, which was reinforced with expanded metal. A new spindle concrete railing similar to the old railing was provided. The approaches were widened to accommodate the 20-foot roadway. Cost, \$2,521.30.

Maher's Creek Bridge, Plaunts Mountain, Sebastopol.—A timber bridge, span 8 feet, roadway, 16 feet. Cost, \$107.25.

Martin Bridge, Rockingham-Wilno Road, Brudenel.—A timber bridge, span 23 feet, with 16-foot roadway. Approaches, 180 feet long, filled with stone and earth. Cost, \$303.00.

Parcher Creek Bridge, Lot 4, Con. 10, Radcliffe.—A timber bridge span 20 feet, roadway, 16 feet. Timber crib abutments, approaches 155 feet long widened and raised. Cost, \$687.18.

Rockingham Creek Bridge, Lot 32, Con. 11, Brudenel.—Work here comprised placing new timbers in south abutment and filling it with stone. The approaches were widened and a new culvert installed, west of the bridge. Cost \$258.85.

Rockingham Creek Bridge, Lot 31, Con. 9, Brudenel.—A timber bridge, span 16 feet with 16 foot roadway. Crib abutments, stone filled. Approaches 225 feet in length, stone filled and top dressed with gravel. Cost \$800.05.

Smith Creek Bridge, Lots 290 and 291, Opeongo Range, Brudenel.—A metal culvert pipe, 24 inches in diameter and 24 feet long. Approaches 90 feet in length, stone filled. Cost, \$207.60.

Stone Creek Bridge, Lot 9, Con. 11, Bagot.—1 48-inch metal culvert pipe, 25 feet long. Approaches 200 feet in length, 18 feet wide and averaging $2\frac{1}{2}$ feet in height, stone filled and top dressed with gravel. Cost, \$568.62.

Whalen Creek Bridge, Lot 5, Con. 14, Brudenel.—A cedar timber bridge with a clear span of 12 feet, roadway 16 feet in clear width. Cedar crib abutments, stone filled. The approaches, 200 feet in length, are built up of stone. Cost, \$629.25.

All the bridge work in South Renfrew was done under the direction of W. C. Millar, Road Inspector.

NORTH RENFREW BRIDGES

Heenan Creek Bridge, Alice.—A concrete bridge with a clear span of 10 feet, with roadway 16 feet in clear width. The abutments are 9 feet in height to the floor level. The floor is a 12-inch slab, reinforced with $\frac{3}{4}$ -inch square steel bars. Steel posts support the wire cable guards which extend over bridge and approaches. Cost, \$672.60.

Jamieson Creek Bridge, Lot. 10, Con. 9, Ross.—A 3-span concrete trestle, 61 feet in length, with roadway 16 feet in clear width. It has a centre span 25 feet clear with end spans each 15 feet clear. The substructure consists of four bents of concrete piles. The centre piles are 24 feet long and the end piles 18 feet long, reinforced with $\frac{3}{4}$ -inch bars. The deck consists of four lines of concrete beams, reinforced with 1-inch bars. On the centre span, the beams are 24 inches deep and on the end spans, the beams are 15 inches deep. The 6-inch floor slab is reinforced with $\frac{5}{8}$ -inch square steel bars. The railing is a concrete slab supported by eight 12-inch by 12-inch concrete posts. The approaches are rock filled and the rock is allowed to fall to a natural slope around the end piles. Cost of bridge, \$5,991.87.

The bridge work in North Renfrew was done under the direction of W. C. Millar, Road Inspector.

WATER SUPPLY

ONTARIO AGRICULTURAL COLLEGE WELL, GUELPH

Water for this institution had formerly been obtained from a drilled well about 500 feet deep. The water was pumped from this depth by compressed air and required a 75-horsepower motor to pump it. Owing to extensions and increased amount of water used at the College, the old well did not supply enough water and it had to be purchased from the City of Guelph. The old

well was situated under the boiler house. This old boiler house is being demolished and the new administration building is to take in this site, so that the well would have been an objectionable feature in the new construction. It was therefore decided to drill a new well and a site was selected to the north of the main building near the new boiler house. A contract was let to the Layne-Bowler Co. of Toronto to drill a 12-inch well on the basis of no water, no pay, and they were to guarantee a flow of 200 gallons per minute. They were to supply and install a deep well pump with motor complete. The work was started in the Fall of 1928 and owing to unforeseen difficulties, continued throughout most of the Winter. The well was drilled through earth a distance of 40 feet, then through rock a distance of 170 feet, or a total depth of 210 feet. On February 26th, 1929, a test was made of the well, but it would only produce from 40 to 50 gallons per minute. It was then dynamited by placing charges of dynamite at various depths. On March 22nd, another test was run and the supply was found to be slightly under 200 gallons per minute. The pump in these tests was down 135 feet in the well and it was decided to lower it to about 160 feet. Another test was made on April 8th and the supply was found to be about 225 gallons per minute, which was sufficient and it was decided to go ahead and install the pump.

The pump is a Layne-Bowler deep well pump and driven with a 40-horse-power Fairbanks-Morse motor. The motor is enclosed in a neat brick pump-house, 12 feet by 12 feet, on concrete foundation. Below the floor of the pump-house is a valve pit formed by the foundation walls in which are located a check valve, hand valve and 3-inch recording meter, so that all the water pumped is metered and a record kept from day to day.

On July 3rd, the pump and well were given a 24-hour test. The well delivered 225 to 230 gallons per minute throughout the test and pumped into the elevated tank against a head of 85 lbs. per square inch. The pump and motor ran very quietly and stood the test perfectly.

A 4-inch cast iron pipe was laid from this pump to the 6-inch main near the gymnasium building.

LONDON HOSPITAL WELL

The well at this institution began to fail to supply the hospital with sufficient water during the past Summer. Apparently this was due to the drilling of several wells in this vicinity by the City of London, as their wells were deeper than that at the hospital and no doubt drained it.

It was thought advisable to deepen the hospital well and lower the pump bowls in order to draw water from a lower level. With this in view, a contract was let to the Ontario Farmers Drainage Co. of London, Ont., to clean out the old well, deepen it and lower the pump bowls. The well formerly consisted of a dug section 8 feet in diameter and 70 feet deep, below which a 12-inch hole had been drilled to a depth of about 60 feet. This 12-inch hole was drilled 23 feet deeper where sulphur was encountered and it was thought advisable to stop drilling. A perforated 10-inch casing was put down inside the 12-inch casing, into the new drilled section. The pump bowls were lowered 42 feet by putting in sections of new tubing each 6 feet long. A draft tube, 9 feet long, was put on below the pump bowls. New shafting and bearings were installed throughout and the pump put in good working order.

On November 27th, 1929, the pump and well were tested and found to deliver over 200,000 gallons per day, which is sufficient to supply the hospital. The pump has been operating and supplying the institution with water for over a month and is a complete success.

MUNICIPAL DRAINAGE—CONSTRUCTED UNDER THE DIRECTION OF DEPARTMENT OFFICIALS.

NIPISSING DRAINAGE

Bonfield Township,	Lot 33, Con. 2 and 3.....	25	rods constructed.
"	" Lot 5, Con. 4.....	38	" "
"	" Lot 14, Con. 4.....	48	" "
"	" Lot 10, Con. 6.....	52	" "
"	" Lot 22, Con. 8.....	80	" "
"	" Lot 25, Con. 8.....	60	" "
"	" Lot 25, Con. 8.....	72	" "
"	" Lot 6, Con. 9.....	42	" "
"	" Lot 7, Con. 9.....	82	" "
"	" Lot 14, Con. 9.....	72	" "
"	" Lot 4, Con. 10.....	45	" "
"	" Lot 8, Con. 10.....	68	" "
"	" Lot 3, Con. 11.....	37	" "
"	" Lot 4, Con. 11.....	36	" "
"	" Lot 2, Con. 12.....	38	" "
Boulter	" Lots 35 and 36, Con. 12.....	78	" "
Calvin	" Lot 35, Con. 8.....	51	" "
Cameron	" Lot 8, Con. A.....	44	" "
Chisholm	" Lot 14, Con. 9.....	42	" "
"	" Lot 15, Con. 10.....	78	" "
"	" Lot 15, Con. 10.....	80	" "
"	" Lot 13, Con. 11.....	69	" "
"	" Lot 15, Con. 11.....	80	" "
"	" Lots 19 and 20, Con. 11.....	120	" "
"	" Lot 2, Cons. 11 and 12.....	225	" "
"	" Lot 8, Con. 12.....	70	" "
"	" Lot 1, Con. 14.....	40	" "
"	" Lot 1, Con. 14.....	80	" "
"	" Lot 15, Con. 14.....	39	" "
"	" Lot 11, Cons. 15 and 16.....	40	" "
"	" Lots 8 and 9, Cons. 16 and 17.....	110	" "
"	" Lot 19, Cons. 16 and 17.....	38	" "
"	" Lot 5, Con. 17.....	48	" "
"	" Lot 7, Con. 17.....	58	" "
"	" Lot 13, Con. 17.....	30	" "
"	" Lot 22, Con. 17.....	49	" "
E. Ferris	" Lot 19, Con. 1.....	42	" "
"	" Lots 15 and 16, Con. 2.....	41	" "
"	" Lot 16, Con. 2.....	32	" "
"	" Lot 23, Con. 2.....	22	" "
"	" Lot 22, Cons. 2 and 3.....	68	" "
"	" Lot 10, Con. 5.....	42	" "
"	" Lot 13, Con. 5.....	35	" "
"	" Lot 13, Con. 5.....	40	" "
"	" Lots 8 and 9, Con. 6.....	68	" "
"	" Lots 8 and 9, Con. 6.....	60	" "
"	" Lots 16 and 17, Con. 6.....	45	" "
"	" Lots 16 and 18, Con. 6.....	39	" "
"	" Lot 5, Con. 7.....	42	" "
"	" Lot 9, Con. 7.....	46	" "
"	" Lot 12, Con. 7.....	65	" "
"	" Lots 16 and 17, Con. 7.....	42	" "
"	" Lot 10, Con. 8.....	38	" "
"	" Lot 17 and 18, Con. 8.....	60	" "
"	" Lot 17, Con. 8.....	60	" "

Nipissing Drainage—Continued

E. Ferris, Township,	Lot 24, Con. 8	52	rods constructed.
“	“ Lot 14, Con. 9	38	“ “
“	“ Lot 18, Con. 9	145	“ “
“	“ Lots 17 and 18, Cons. 9 and 10	150	“ “
“	“ Lots 23 and 24, Con. 10	50	“ “
“	“ Lot 26, Con. 10	39	“ “
“	“ Lots 12 and 13, Con. 11	125	“ “
“	“ Lots 7 and 8, Con. 12	70	“ “
“	“ Lots 21 and 22, Con. 13	40	“ “
Papineau	“ Lot 11, Cons. 7 and 8	40	“ “
“	“ Lot 9, Con. 8	35	“ “
“	“ Lot 11, Con. 8	85	“ “
“	“ Lot 14, Con. 8	22	“ “
“	“ Lot 8, Con. 9	32	“ “
“	“ Lots 11 and 12, Con. 10	50	“ “
“	“ Lot 8, Con. 11	90	“ “
“	“ Lot 19, Con. 12	38	“ “
“	“ Lot 19, Con. 12	42	“ “
“	“ Lot 18, Con. 13	38	“ “

The drainage work in the Nipissing District was done under the direction of J. O. Rochefort, Road Inspector. \$8,110.95 was expended on the work.

PARRY SOUND DRAINAGE

The following drains were constructed in the Parry Sound District under the direction of Duncan Mitchell, Road Inspector:

Carling Township,	Lot 69, Con. 12	180	rods constructed.
Himsworth-Laurier Townline		320	“ “
Himsworth Township,	Lot 4, Con. 5	100	“ “
“	“ Lots 13 and 14, Con. 12	88	“ “
“	“ Lots 20 to 27, Cons. 17, 18 & 19, 1, 4, 7, 5	160	“ “
“	“ Lots 1 and 2, Con. 21	160	“ “
Machar	“ Lots 11 and 12, Con. 10	240	“ “
McConkey-Wilson Townline,	Lots 3 and 6	180	“ “
McDougall Township,	Lot 4, Con. A	258	“ “
McMurrich	“ Lot 19, Con. 11	251	“ “
Nipissing	“ Lots 10 and 11, Cons. 6 and 7	120	“ “
Strong	“ Lots 12, 13 and 14, Con. 11	382	“ “

\$2,977.41 was expended on this work.

MUSKOKA DRAINAGE

The following drains were opened up in the District of Muskoka under the direction of Wm. Lowe, Supervising Foreman:

Baxter Township,	Lots 32 and 33, Con. 4	178	rods constructed.
Caldwell	“ Lot 66, Con. A	50	“ “
Chaffey	“ Lots 3 and 4, Con. 6	300	“ “
“	“ Lot 6, Con. 14	160	“ “
Draper-Ryde Townline,	Lot 24, Con. 13	45	“ “
Franklin	“ Lots 16 and 17, Con. 14	32	“ “
“	“ Port Cannington Road	260	“ “
Medora	“ Ferndale-Port Carling Road	164	“ “
“	“ Lots 18 and 19, Con. 11	110	“ “
Morrison	“ Lots 28, 29 and 30, Con. 2	100	“ “
“	“ Lots 25 and 26, Con. 7	110	“ “
“	“ Lots 33, 34 and 35, Con. 12	80	“ “
Muskoka	“ Lot 11, Cons. 3 and 4	180	“ “
“	“ Lot 11, Con. 10	50	“ “
Oakley	“ Lots 17 and 18, Con. 13	90	“ “
Stephenson	“ Lots 10 to 15, Cons. 6 and 7	550	“ “
Stisted	“ Lots 10 and 11, Con. 2	167	“ “
“	“ Lot 6, Con. 4	244	“ “
Watt	“ Lots 27 to 32, Con. 2	170	“ “
Wood	“ Lot 45, Con. B	180	“ “
“	“ Lot 12, Con. 4, and Lot 13, Con. 3, rockwork.		

\$4,449.83 was expended on this work.

EAST SIMCOE DRAINAGE

The following drains were constructed in the district of East Simcoe, under the direction of C. H. Jermey, Road Inspector:

Medonte Township,	Lot 15, Con. 4.....	80	rods constructed
"	" Lot 21, Con. 8.....	26	" "
"	" Lots 10 and 11, Con. 11.....	80	" "
"	" Lot 9, Con. 12.....	120	" "
"	" Lot 23, Con. 12.....	60	" "
"	" Lot 19, Con. 14.....	125	" "
Matchedash	" Lots 6 and 7, Cons. 2 and 3.....	380	" "
"	" Lot 8, Con. 2.....	110	" "
"	" Lot 12, Con. 2.....	80	" "
"	" Lot 13, Con. 4.....	20	" "
"	" Lot 7, Con. 5.....	130	" "
"	" Lot 7, Cons. 3 and 4.....	72	" "
Orillia	" Lots 17, 18 and 19, Con. 1.....	180	" "
"	" Lot 13, Con. 2.....	100	" "
"	" Lots 18 and 19, Con. 2.....	320	" "
"	" Lots 22 and 23, Con. 2.....	120	" "
"	" Lot 3, Con. 3.....	110	" "
"	" Lot 4, Con. 3.....	32	" "
"	" Lot 3, Con. 4.....	180	" "
"	" Lot 3, Con. 4.....	60	" "
"	" Lot 7, Con. 4.....	110	" "
"	" Lots 15 and 16, Con. 5.....	30	" "
"	" Lot 16, Con. 5.....	120	" "
"	" Lots 17 and 18, Con. 5.....	180	" "
"	" Lot 7, Cons. 5 and 6.....	130	" "
"	" Lot 10, Con. 6.....	120	" "
"	" Lot 15, Con. 6.....	40	" "
"	" Lot 10, Con. 7.....	60	" "
"	" Lot 12, Con. 7.....	110	" "
"	" Lot 14, Con. 8.....	80	" "
"	" Lot 14, Con. 7.....	110	" "
"	" Lots 19 and 20, Con. 7.....	260	" "
"	" Lot 15, Con. 8.....	220	" "
"	" Lots 15 and 16, Con. 9.....	250	" "
"	" Lot 18, Con. 9.....	90	" "
Oro	" Lot 24, Cons. 2 and 3.....	70	" "
"	" Lots 1 and 2, Con. 3.....	70	" "
"	" Lot 8, Con. 2.....	65	" "
Tay	" Lots 12 and 13, Con. 5.....	120	" "
"	" Lot 18, Con. 12.....	40	" "

\$3,465.47 was expended on this work.

CENTRAL SIMCOE DRAINAGE

The following drains were opened up in Centre Simcoe under the direction of C. H. Jermey, Road Inspector:

Tiny Township,	Lots 19 and 20, Con. 1.....	122	rods constructed.
"	" Lot 18, Con. 2.....	124	" "
"	" Lots 12 and 13, Con. 17.....	200	" "
Vespra	" Lot 23, Cons. 9 and 10.....	100	" "
"	" Lots 5 and 6, Cons. 12 and 13.....	301	" "

\$1,497.10 was expended on this work.

NORTH GREY DRAINAGE

In 1924 and 1925, a drain was opened up through a large swamp on the line between Lots 32 and 33, from the road in front of Con. 14, Keppel, south 2,600 feet to a creek and thence east on the creek to Indian River. This year the drain was extended north on the same line from the 14th Con. road, a distance of 200 rods. \$857.25 was expended on the work.

NORTH BRUCE DRAINAGE

Lindsay Township Drain, Lot 35, Con. 5, Dyers Bay.—This work consisted of blasting a number of rock ledges from a creek bottom over a distance of 100 rods to relieve a road from flooding.

St. Edmunds Township Drain, Lot 50, Con. 1-E.—This work consisted of opening up a rock cut 1,100 feet in length through a ridge of rock to relieve a section of the Bury Road from serious flooding.

Sauble River Improvement, Lot 12, Con. 10, Amabel.—This work consisted of opening a new channel across an elbow in the river channel that caused serious damage to adjoining lands from flooding. Stones were carried down to the elbow and lodged in the old channel, completely filling it. The new cut is 200 feet long, but it will prevent further trouble at this point.

The work in North Bruce was done under the direction of James Weaver, Public Works Foreman. \$1,587.26 was expended on the work.

NORTH ONTARIO DRAINAGE

The following drains were opened up in North Ontario under the direction of C. H. Jermey, Road Inspector:

Mara Township,	Lots 12 and 13, Con. 5.....	180	rods constructed.
"	"	Lots 24, 25 and 26, Cons. 7 and 8.....	237 " "
"	"	Lot 19, Con. 9.....	40 " "
"	"	Lots 21, 22 and 23, Con. 10.....	137 " "
"	"	Lots 28 and 29, Con. 11.....	110 " "
"	"	Lot 22, Cons. 12 and 13.....	167 " "
"	"	Lot 21, Con. 13.....	110 " "
Rama	"	Lot 5, Con. A.....	91 " "
"	"	Lot 2, Con. C.....	35 " "
"	"	Lot 7, Con. E.....	51 " "
"	"	Lot 2, Con. H.....	150 " "
"	"	Lot 22, Con. 2.....	160 " "
"	"	Lot 21, Con. 7.....	91 " "

\$1,525.10 was expended on this work.

HALIBURTON-VICTORIA DRAINAGE

The following drains were opened up in Haliburton and Victoria under the direction of L. A. Pritchard, Road Inspector:

On Anson-Minden Townline,	Lot 32.....	41	rods constructed.
Bexley Township,	Lot 7, Con. 6.....	120	" "
Bexley-Carden Townline.....		82	" "
Carden Township,	Lots 15, 16 and 17, Con. 1.....	120	" "
"	McGee drain.....	320	" "
Cardiff	"	Highland Grove drain, 12-in. pipe.....	150 ft. "
"	"	Burleigh Road drain.....	40 rods "
Dalton	"	Lot 26, Con. 8.....	68 " "
"	"	Lot 20, Con. 10.....	90 " "
"	"	Lot 22, Con. 10.....	85 " "
"	"	Lot 31, Con. 10.....	78 " "
"	"	Quarter Line drain.....	24 " "
Laxton	"	Lots 5 and 6, Con. 10.....	60 " "
"	"	Lot 7, Con. 7.....	50 " "
Lutterworth Township,	Deep Bay Road drain.....	40	" "
"	"	Lots 7 and 8, Con. 14.....	70 " "
Monmouth	"	Lot 18, Con. 11.....	72 " "
Snowdon	"	Lots 17 and 18, Con. 14.....	150 " "
Somerville	"	Lot 1, Con. 8.....	90 " "
"	"	Lots 1 to 8, Cons. 8 and 9.....	350 " "
"	"	Lot 1, Con. 9.....	56 " "
"	"	Lot 1, Cons. 11 and 12.....	145 " "

West Guilford Township, Lot 7, Cons. 2 and 3..... 58 " "

\$3,793.67 was expended on this work.

NORTH HASTINGS DRAINAGE

The following drains were opened up in North Hastings under the direction of W. E. Wiggins, Road Inspector:

Actinolite drain, 12-inch pipe.....	180 ft.	constructed.
Carlow Township, Fraser Creek drain.....	160 rods	"
" " May Swamp drain.....	320 "	"
Dungannon " Lot 21, Con. 10.....	270 "	"
Elzevir " Lots 20 and 21, Con. 11.....	200 "	"
Madoc " Lots 7 to 12, Con. 7.....	480 "	"
" " Lot 8, Con. 9.....	30 "	"
" " Lot 12, Con. 9.....	60 "	"
Mayo Road drain.....	300 "	"

\$3,950.27 was expended on this work.

ADDINGTON-FRONTENAC DRAINAGE

The following drains were opened up in Addington-Frontenac under the direction of W. W. Pringle, Road Inspector.:

Barrie Township, Lot 27, Marble Lake rock cut.....	150 ft.	constructed.
Denbigh " Lots 17 and 18, Con. 9.....	20 rods	"
Hinchinbrooke " Fish Creek rock cut.....	202 ft.	"
Kennebec " Lot 17, Cons. 3 and 4.....	180 rods	"
" " Lot 25, Cons. 7 and 8.....	302 "	"
Portland " Napanee River, Cons. 9 and 10.....	380 "	"
" " Lot 14, Con. 12, Mud Lake.....	250 "	"
Olden " Lots 3 and 4, Cons. 18 and 19.....	387 "	"
Oso " Lot 26, Con. 6.....	167 "	"

\$4,640.94 was expended on this work.

SOUTH LANARK DRAINAGE

Bolton Creek Improvement, Lot 21, Con. 11, South Sherbrooke.—This work consisted of removing rock ledges from the creek bed and widening the channel. The rock obstructions caused serious flooding above. The two ledges were 80 feet in length. \$590.92 was expended on the work which was done under the direction of W. W. Pringle, Road Inspector.

SOUTH RENFREW DRAINAGE

The following drains were opened up in South Renfrew under the direction of W. C. Millar, Road Inspector:

Admaston-Bagot Townline, Lots 2 and 3.....	250 rods	constructed.
Brougham Township, Griffith Road, Lots 35 and 36.....	300 "	"
Hagarty " Traymore Road drain.....	400 "	"
" " Killaloe-Bonnechere Road.....	300 "	"
" " Lot 3, Con. 8; Lots 3, 4 and 5, Con. 9.....	325 "	"
Raglan " Con. 6.....	260 "	"
" " Lots 31, 32 and 33, Con. 13.....	320 "	"
Radcliffe " Lots 18 and 19, Con. 6.....	45 "	"
" " Lot 26, Cons. 10 and 11.....	45 "	"
" " Lots 17 and 18, Con. 13.....	100 "	"
" " Combermere-Palmer Road.....	300 "	"

\$2,073.37 was expended on this work.

NORTH RENFREW DRAINAGE

Alice Township, Lots 14 and 15, Con. 8.....	190 rods	constructed.
N. Algona " Lots 29 and 30, Con. 7.....	140 "	"
Petewawa " Lot 14, Con. 4.....	22 "	"
Stafford " Lots 9 and 10, Cons. 3 and 5.....	200 "	"

\$809.25 was expended on this work, which was done under the direction of W. C. Millar, Road Inspector for the district,

DRAINAGE AID

BEAUDETTE RIVER DRAIN IN CHARLOTTENBURG AND LANCASTER, IN THE COUNTY OF GLENGARRY

This drain was constructed by the Township of Charlottenburg under the provisions of the Municipal Drainage Act and in accordance with the report and plans prepared by M. J. McLennan, Ontario Land Surveyor. The engineer's report was adopted on November 15th, 1927, and the petition for aid was filed on February 7th, 1928, in this Department.

This drainage work commences at the centre line of Lot 27 in the 8th Concession of Charlottenburg and extends east through the river valley to a sufficient outlet which is reached at the east side of Lot 18 in the 6th Concession of Lancaster. The length of the drain is 83,100 feet, nearly 16 miles. Under the engineer's plan, the drain was to have a bottom width of 20 feet at the outlet, but under an arrangement with the contractor, the width was changed. The drain as constructed, has a bottom width of 18 feet throughout Charlottenburg and a bottom width of 30 feet through Lancaster. The change was made to allow the use of larger dredges. The change in width will nearly double the capacity of the drain. The upper end of the drain, about 61,000 feet, runs through a marsh from 20 to 120 rods in width. Through this section, the bottom is about 6 feet below the level of the marsh. The lower end of the drain, about 22,000 feet, is through high ground. In this section, the greater part of the excavation was in hardpan and solid rock. The depth of cut varies from 6 to 10 feet. The side slopes were 1 to 1 through the earth sections and $\frac{1}{4}$ to 1 in the rock section.

The drainage area comprises some 32,074 acres, 9,864 acres in Kenyon, 15,045 acres in Charlottenburg and 7,165 acres in Lancaster. The estimated cost of the work was \$99,987.47, which was assessed by the engineer as follows:

On lands and roads in Charlottenburg.....	\$60,308 94
“ “ Lancaster.....	26,698 53
“ “ Kenyon.....	12,980 00

The individual assessments in Charlottenburg are very heavy, the assessments for outlet \$3.50 per acre and the assessment for benefit on the marsh lands about \$25.00 per acre.

I examined the drain on August 8th, 1929, and found the work completed in a very satisfactory manner. This drain is a trunk channel within the meaning of the Provincial Aid to Drainage Act and is entitled to aid. The township treasurer reports the total cost of the drain at \$97,097.64. On report, a grant of \$19,419.00, being 20 per cent. of the cost of the work, was paid to the Township of Charlottenburg, the initiating municipality.

DILLON DRAIN IN THE TOWNSHIPS OF LOGAN AND MCKILLOP IN SOUTH PERTH AND SOUTH HURON

This drain was constructed by the Township of Logan under the provisions of the Municipal Drainage Act and in accordance with plans, etc., prepared by John Roger, O.L.S. and C.E.

The engineer's report was adopted on July 27th, 1925, and the petition for aid was filed in this Department on May 21st, 1926.

The work commences at the centre line of Lot 34, in the 6th Concession of Logan, and runs north and west 2,700 feet to the McKillop townline, thence west through McKillop following the watercourse through Concessions 7, 6 and 5, reaching a sufficient outlet at the centre of Lot 24 in the 5th Concession of McKillop. The total length of the drain is 43,900 feet or a little over eight miles. The depth of cut ranges from $2\frac{1}{2}$ to $7\frac{1}{2}$ feet and the bottom width ranges from 2 feet at the head of the drain to 15 feet at the outlet. Side slopes of 1 to 1 throughout. The estimated cost of the work was \$17,465.30, which was assessed by the engineer on the lands and roads affected as follows:

On lands and roads in Logan.....	\$1,440 30
“ “ McKillop.....	13,025 00

The expenditure on the drain under the authority of by-law No. 29, as reported by the treasurers of Logan and McKillop, was \$11,134.10. In the detail statement of expenditures there are several items included which are not shown in the engineer's estimates and are not authorized by by-law No. 29. These unauthorized expenditures amount to \$110.15, in the Logan statement \$45.35, and in the McKillop statement \$64.80. Deducting these expenditures from the reported expenditure, \$11,134.10, leaves the authorized expenditure, \$11,033.95, on which the grant is based.

I examined the drain on October 24th, 1928, and found the work completed in a satisfactory manner.

This drainage is a trunk channel within the meaning of the Provincial Aid to Drainage Act and is entitled to aid.

On report, a grant of \$2,206.00, being 20 per cent. of the cost of the work, was paid to the Township of Logan, the initiating municipality.

GOWRIE DRAIN IN THE TOWNSHIP OF DOVER IN WEST KENT

This work comprises the repair and improvement of the Gowrie drain by the Township of Dover under the provisions of the Municipal Drainage Act. The report of W. G. McGeorge, engineer on the work, was adopted by the Council of Dover on August 2nd, 1927, and the petition for aid was received in this Department on November 23rd, 1927.

This drain commences at the line between Lots 17 and 18 and runs west on the south side of the road between the 5th and 6th Concessions to the Rivard drain on the side road between Lots 5 and 6, a distance of 24,350 feet, or about $4\frac{1}{2}$ miles. The upper portion of the drain, 15,750 feet, was constructed by team work. On this portion, the bottom width ranges from 3 to 6 feet, with depth of cut from $4\frac{1}{2}$ to 7 feet, and side slopes of 1 to 1. The lower portion of the drain, 8,600 feet, was dredge work. The bottom width is 20 feet with side slopes of 1 to 1. The depth of cut runs from 9 to 11 feet. The engineer's estimate of the cost was \$11,000, which was assessed on lands and roads in the Township of Dover.

I examined the drain in June, 1928, and found the work completed in a satisfactory manner. The work is a trunk channel within the meaning of the Provincial Aid to Drainage Act and the drain is entitled to aid.

The township treasurer reports the expenditure on the drain under the authority of the by-law at \$10,363.50.

On report, a grant of \$2,072.00, being 20 per cent. of the cost of the work, was paid to the Township of Dover.

HIND OUTLET DRAIN REPAIR OF 1927, IN THE TOWNSHIP OF DOVER IN WEST KENT

This drain was constructed by the Township of Dover under the provisions of the Municipal Drainage Act. The petition for aid was filed in this Department on November 23rd, 1927, and the engineer's report was adopted on October 3rd, 1927.

The drain commences at the sideroad between Lots 12 and 13, the winter line road, and extends westerly on the southerly side of the 12th Concession road to Lake St. Clair, a distance of 10,166 feet, or nearly two miles. The drain has a bottom width of 20 feet throughout with side slopes of 1 to 1. The depth of cut ranges from 6 to 13½ feet, the new bottom being from 1 foot, 7 inches, to 2 feet, 6 inches below the level of the old bottom.

The estimated cost of the work was \$10,100, which was assessed against lands and roads in Dover. The assessments are very heavy for repair work, running as high as \$4.80 per acre. The township treasurer reports the final cost of the work at \$10,155.87.

I examined the drain in June, 1928, and found the work completed in a satisfactory manner.

This drain is a trunk channel within the meaning of the Provincial Aid to Drainage Act and is entitled to aid.

On report, a grant of \$2,030.00, being 20 per cent. of the cost of the work, was paid to the Township of Dover.

HIND RELIEF DRAIN AND THE HIND RELIEF DRAIN EXTENSION IN THE TOWNSHIP OF DOVER IN WEST KENT

This drainage work was carried out by the Township of Dover under the provisions of the Municipal Drainage Act and in accordance with the reports and plans prepared by W. G. McGeorge, O.L.S. and C.E.

The work was constructed under the authority of two by-laws. The engineer's report under by-law No. 613 was adopted on July 5th, 1926, and the petition for aid was filed in this Department on November 23rd, 1927.

The engineer's report under by-law No. 621 was adopted on October 3rd, 1927, and the petition for aid was filed in this Department on November 23rd, 1927. While the lower portion of the drain under by-law No. 613 and estimated to cost \$9,000 was under construction, a notice was served on the council to repair the upper portion of the drain. By-law No. 621 was passed and the extension of the drain estimated to cost \$9,000, was provided for, although under two reports and by-laws, the work is one continuous drain.

The lower section of the drain starts at the Winter line, the side line between Lots 12 and 13, and extends west along the centre line of the 11th Concession of Dover, to Lake St. Clair, a distance of 13,550 feet. The depth of cut ranges from 6 feet to 12 feet 8 inches, and the bottom width is 20 feet, with side slopes of 1 to 1. The upper section of the drain under by-law No. 621 commences at the upper end of the lower section at the Winter line and extends east on the centre line of Concession 11, 124 rods. Thence south on the line between Lots 13 and 14, 270 rods to the centre of Concession 10. Thence east on centre line of Concession 10, 120 rods. Thence south on line between Lots 14 and 15 to the rear of Concession 8. The length of this section is 15,340 feet. The total length of both sections is 28,890 feet, about 5½ miles. The depth of cut of

the upper section ranges from 9 to 14 feet. The bottom width is 18 feet, with side slopes of 1 to 1. The assessments are very heavy for repair work, running in excess of \$3.00 on some of the lands.

I examined the drain on June 22nd, 1928, and found the work completed in a very satisfactory manner.

The expenditure on the drain under by-law No. 613 was \$8,317.72, and under by-law 621, the expenditure was \$8,651.00, or \$16,968.72 in all.

This drainage work is a trunk channel within the meaning of the Provincial Aid to Drainage Act and should be entitled to aid. On report a grant of \$3,393.00, being 20 per cent. of the cost of the work, was paid to the Township of Dover.

MUD CREEK IMPROVEMENT AND EXTENSION DRAINAGE SCHEME IN THE TOWNSHIP OF STEPHEN IN THE SOUTH HURON

This drain was constructed by the Township of Stephen under the provisions of the Municipal Drainage Act and in accordance with plans prepared by Geo. A. McCubbin, O.L.S. and C.E. The engineer's report was adopted on April 2nd, 1928, and the petition for aid was filed in this Department on March 11th, 1929.

The drain commences at the centre line of Lot 18, at the boundary between the Townships of Hay and Stephen, and runs south through the 11th, 10th and 9th Concessions of Stephen, to the boundary between Stephen and McGillivray at the 18-19 side road, where a sufficient outlet was reached. The total length of the drain being 40,100 feet, about $7\frac{1}{2}$ miles.

The bottom width of the drain is 3 feet at the head and gradually widens to 10 feet at the outlet. The depth of cut ranges from 5 to 10 feet and the side slopes are 1 to 1 throughout. The estimated cost of the work was \$18,965.00, which was assessed by the engineer as follows:

On lands and roads in Stephen.....	\$17,367 00
" " Hay.....	1,598 00

The township treasurer reports the final cost of the work at \$14,426.99. Included in this are items of interest paid, \$51.62, and items of rebates on assessment, \$44.52 or \$96.14, which should be deducted from the cost of the work. These deductions reduce the final cost of the work as authorized by by-law to \$14,5 0.85.

I examined the drain on July 4th, 1929, and found the work completed in a very satisfactory manner.

On report, a grant of \$2,866.00, being 20 per cent. of the cost of the work, was paid to the Township of Stephen.

MUNICIPAL DRAIN NO. 8 IN THE TOWNSHIP OF HOWICK, IN NORTH HURON

This drain was constructed by the Township of Howick under the provisions of the Municipal Drainage Act and in accordance with plans, etc., prepared by Fred A. Edgar, Civil Engineer. The engineer's report was adopted by the Council of Howick on October 5th, 1926, and the petition for aid was filed in this Department on July 4th, 1927.

This drain commences at a sink-hole in the 20-21 side road, near the middle of the 16th Concession of Howick and runs in a southerly and easterly direction along a natural watercourse to Lot 26. Thence southerly and westerly along the watercourse to a sufficient outlet, which is reached at Lot 21 in the 11th Concession of Howick, a length of 32,733 feet.

The drain has a bottom width of 3 feet at the head and widens gradually to a width of 14 feet at the outlet. The depth of cut ranges from 2 to 7 feet with side slopes of 1 to 1.

The estimated cost of the work was \$16,211.60, which was assessed by the engineer as follows:

On lands and roads in	Howick.....	\$15,254 03	
“	“	Miato.....	940 55
“	“	Clifford.....	17 02

I examined the drain in November, 1927, and found the work completed in a satisfactory manner.

The township treasurer of Howick reports the gross expenditure on the drain as authorized by the by-law at \$17,575.01. This amount includes payments for bank interest amounting to \$1,278.75. This amount should be deducted from the gross expenditure, leaving the net expenditure on the drain \$16,296.26.

This drain is a trunk channel within the meaning of the Act and is entitled to aid. On report, a grant of \$3,259.00, being 20 per cent. of the cost of the work, was paid to the Township of Howick, the initiating municipality.

PIKE CREEK DRAIN REPAIRS IN THE TOWNSHIP OF SANDWICH SOUTH, IN NORTH ESSEX

This drainage work was constructed by the Township of Sandwich South, under the provisions of the Municipal Drainage Act and in accordance with the plans and report of Jas. S. Laird, O.L.S. The engineer's report was adopted by the council on August 9th, 1926, and the petition for aid was filed in this Department on December 7th, 1926.

The drain commences at the west side of the townline between Maidstone and Sandwich South and runs west along the south side of Provincial Highway No. 3, the Talbot Road, a distance of 108 rods, where it enters Pike Creek. Thence, it follows the course of the creek, west, north and east, through Sandwich South and Maidstone to the centre of Lot 5 in the Pike Creek range of lots. The total length of drain is 2,922 rods, or about 9 miles.

The depth of cut varies greatly, running from 4 to 11 feet. The bottom width ranges from 2½ feet at the head of the drain to 26 feet at the outlet, with side slopes of 1¼ to 1 throughout.

The total estimated cost of the work was \$22,597.00, which was assessed by the engineer as follows:

On lands and roads in	Maidstone.....	\$7,221 00	
“	“	Sandwich East.....	283 30
“	“	Sandwich South.....	14,992 70
On W.E. & L.S. Electric Railway.....		100 00	

The total expenditure on the drain under the authority of by-law No. 578, as reported by the township treasurer, was \$21,535.10.

This drain is a trunk channel and is entitled to aid under the provisions of the Provincial Aid to Drainage Act. I examined the drain in November, 1917, and found the work completed in a satisfactory manner.

On report, a grant of \$4,307.00, being 20 per cent. of the cost of the work was paid to the Township of Sandwich South, the initiating municipality.

RIVARD DRAIN, IN THE TOWNSHIP OF DOVER, IN WEST KENT

This drainage work was constructed by the Township of Dover under the Provisions of the Municipal Drainage Act in accordance with the report of W. G. McGeorge, O.L.S. and C.E. The engineer's report was adopted by the Council on October 4th, 1926, and the petition for aid was filed in this Department on June 27th, 1927.

This work comprises the repair of the lower end of the Rivard Drain, which was constructed many years ago. The drain runs through a low flat section of country where the surface is but little above the level of Lake St. Clair. The work begins at the line between Lots 10 and 11, and extends westerly along the south side of the road in front of the 5th Concession, to the side road between Lots 5 and 6. Thence northerly along the east side of the side road to the road in front of the 7th Concession. Thence westerly along the south side of the 7th Concession road to the centre of Lot 2, thence west across Lots 2 and 1, to the McFarlane Relief drain at the northwest angle of Lot 1 in the 7th Concession, a total length of 31,800 feet, about 6 miles. The drain has a bottom width of 16 feet at the upper end and gradually widens out to 25 feet at the outlet. Side slopes are 1 to 1. The depth of cut ranges from 6 to 8 feet from the surface and the new bottom line is from $2\frac{1}{2}$ to 4 feet below the old bottom. The greater part of the drain is along travelled roads on which the earth has been spread. The old grades which were narrow and dangerous, have been widened and splendid road beds are now ready for improvement. The township at large is very heavily assessed for the benefit to roads.

The estimated cost of the work was \$26,000, which was assessed against lands and roads in Dover. The township treasurer reports the total expenditure on the drain under the authority of by-law No. 616 at \$27,536.25.

I examined the drain in June, 1928, and found the work completed in a very satisfactory manner. This drain is a trunk channel within the meaning of the Provincial Aid to Drainage Act and is entitled to aid.

On report, a grant of \$5,507.00, being 20 per cent. of the cost of the work, was paid to the Township of Dover.

SCOTT DRAIN, IN THE TOWNSHIP OF MARYBOROUGH IN WEST WELLINGTON, AND WALLACE IN NORTH PERTH

This drain was constructed by the Township of Maryborough under the provisions of the Municipal Drainage Act and in accordance with plans, etc., prepared by F. A. Edgar, Civil Engineer.

The engineer's report was adopted on April 16th, 1927, and the petition for aid was filed in this Department on July 4th, 1927.

The drain commences at the line of Lots 4 and 5 in the 10th Concession of Maryborough and extends west and south through the 10th, 9th and 8th Concessions to the Wallace boundary. Thence west through the 8th and 7th Concessions of Wallace to the Kells Municipal Drain at the sideline between Lots 18 and 19. The total length of the drain is 39,364 feet, about $7\frac{1}{2}$ miles. The depth of cut varies greatly, ranging from 3 to 7 feet. The bottom width is 3 feet at the head and widens gradually to 7 feet at the outlet. Side slopes of 1 to 1 throughout.

The estimated cost of the work was \$16,216.82, which was assessed by the engineer on the lands and roads affected as follows:

On lands and roads in Maryborough.....	\$7,713 97
“ “ Wallace.....	8,502 45

I examined the drain on October 25th, 1928, and found the work completed in a satisfactory manner.

The treasurer of Maryborough reports the total cost of the work under by-law No. 531 at \$16,395.73. The upper portion of the drain, 2,236 feet, comprises covered tile drains costing with a proportionate share of incidental expenses, \$942.73. Eliminating this amount from the total cost leaves the cost of the trunk channel on which the grant is based, \$15,453.00.

This drain is a trunk channel within the meaning of the Provincial Aid to Drainage Act and is entitled to aid. On report, a grant of \$3,090.00, being 20% of the cost of the work, was paid to the Township of Maryborough.

TOWNLINER DRAIN REPAIR, ON THE TOWNLINER BETWEEN THE TOWNSHIPS OF CHATHAM AND DOVER, IN WEST KENT

This drain was constructed by the Township of Chatham under the provisions of the Municipal Drainage Act and in accordance with plans, etc., prepared by W. G. McGeorge, O.L.S. and C.E. The engineer's report was adopted on June 6th, 1927, and the petition for aid was filed in this Department on November 23rd, 1927.

This drain commences at the centre line of the 15th Concession of Chatham Township, and extends northwest on the east side of the Chatham Dover townline a distance of 988 rods, discharging into the Sydenham River. The drain has a depth of cut ranging from 5 feet 6 inches to 14 feet 4 inches. The bottom width is 16 feet throughout with side slopes of 1 to 1.

The engineer's estimate of the cost of the work was \$15,300, which was assessed by the engineer on the lands and roads affected, as follows:

On lands and roads in Chatham township.....	\$14,711 00
“ “ Dover.....	439 00
“ “ town of Wallaceburg.....	150 00

I examined the drain on June 22nd, 1928, and found the work completed in a satisfactory manner.

The treasurer of the Township of Chatham reports the expenditure on the work under the authority of by-law No. 1202, at \$13,039.00.

This drainage work is a trunk channel within the meaning of the Provincial Aid to Drainage Act and is entitled to aid. On report, a grant of \$2,607.00, being 20 per cent. of the cost of the work, was paid to the Township of Chatham, the initiating municipality.

WHITEBREAD PUMPING WORKS DRAINAGE SCHEME, IN THE TOWNSHIP OF DOVER, IN WEST KENT

This drainage work was carried out by the Township of Dover under the provisions of the Municipal Drainage Act and in accordance with plans prepared by W. G. McGeorge, O.L.S. and C.E. The report was adopted on March 23rd, 1925, and the petition for aid was filed in this Department on July 14th, 1925.

The work comprises the repair of the internal drainage system of a small pumping scheme in the northwest part of the Township of Dover. The drainage area consists of 1,800 acres of swamp lands too low to admit of gravity drainage. In 1913, this area was drained by embankment and pumping. The present work consists of restoring the drains to an efficient state. Part of the work was done with a floating dredge and part is team work. Four miles of dredge cut were carried out. These cuts average about 9 feet in depth. The bottom width is 16 feet with side slopes of 1 to 1.

The team work covers 1,198 rods of ditching, or nearly four miles. These drains range in depth from 3 to 5 feet. Bottom width is 3 to 6 feet, with side slopes of 1 to 1.

The estimated cost of the work was \$14,486.00, which was assessed against the lands and roads within the drainage area of 1,800 acres. The individual assessments are very heavy, ranging from \$5.00 to \$10.00 per acre.

I examined the drainage scheme on June 22nd, 1928, and found the work completed in a satisfactory manner.

The township treasurer reports the expenditure on the drain under the authority of By-law No. 608 at \$13,341.87.

This scheme is a drainage work within the meaning of subsection (b) of section 2 of the Provincial Aid to Drainage Act, to render more effective a drainage work by embanking or pumping and is entitled to aid under the provisions of the Act.

On report, a grant of \$2,668.00, being twenty per cent. of the cost of the work, was paid to the Township of Dover.

A. J. HALFORD,
Public Works Engineer.

Toronto, October 31st, 1929.

Toronto, January 17th, 1930.

HONOURABLE GEO. S. HENRY,
Minister of Public Works and Highways, Ontario.

SIR,—

I have the honour to submit the following statement showing the several contracts entered into with His Majesty during the twelve months ending 31st of October, 1929, in connection with the Public Buildings and Works, subject to the control of the Public Works Department of Ontario.

I have the honour to be,

Sir,

Your obedient servant,

DIGBY HORRELL,
Secretary and Purchasing Agent.

STATEMENT No. 11

Showing the several contracts entered into with His Majesty during the twelve months ending the 31st of October, 1929, in connection with the Public Buildings and Works, subject to the control of the Public Works Department, Ontario

Date	Work	Subject of Contract	Contractors	Amount
1928 Nov. 1	Hamilton, Ontario Hospital.....	Installation of plumbing work in Infirmary Building.	The Adam Clark Limited, Hamilton, Ont..	\$14,000 00
Nov. 22	Hamilton, Ontario Hospital.....	Installation of heating and ventilating in Infirmary Building.	The Adam Clark Limited, Hamilton, Ont..	10,750 00
Nov. 26	Guelph, Ontario Agricultural College.....	Drilling well and installing pump for the increasing of the water supply.	The Layne Bowler Chicago Co., Toronto, Ont.....	6,343 75
Nov. 29	Hamilton Ontario Hospital.....	Electrical work in Infirmary Building.....	Robinson and Robinson, Hamilton, Ont....	2,444 00
Dec. 31	Toronto.....	Alterations to Ontario Provincial Savings Office at 2048 Danforth Ave.	Henry Massie, Toronto, Ont.....	3,180 00
1929 Feb. 23	Bowmanville, Boys' Training School.....	Construction of addition to School Building	T. E. Flaxman, Bowmanville, Ont.....	26,100 00
Feb. 23	Bowmanville, Boys' Training School.....	Construction of gymnasium.....	T. E. Flaxman, Bowmanville, Ont.....	29,709 00
Mar. 5	Hamilton, Ontario Hospital.....	Supply and erection of passenger elevator..	The Otis-Fensom Elevator Co., Toronto, Ont.....	3,984 00
Mar. 5	London, Ontario Hospital.....	Supply and erection of passenger elevator..	The Otis-Fensom Elevator Co., Toronto, Ont.....	4,303 00
April 6	Englehart.....	Erection of building to be used for lock-up, etc.	Hill-Clark-Francis Limited, New Liskeard, Ont.....	4,950 00
May 10	Guelph, Ontario Agricultural College.....	Erection of new Horticultural Building.....	E. P. Muntz Limited, Toronto.....	108,916 00
May 23	Bowmanville, Boys' Training School.....	Installation of heating, ventilating and plumbing in the gymnasium and addition to school building.	W. L. Elliott, Bowmanville, Ont.....	14,323 00

STATEMENT No. 11—Continued

Showing the several contracts entered into with His Majesty during the twelve months ending the 31st of October, 1929, in connection with the Public Buildings and Works, subject to the control of the Public Works Department, Ontario

Date 1929	Work	Subject of Contract	Contractors	Amount
May 28	Kenora Gaol.....	Construction of Gaol Building. All trades excepting heating, plumbing and electric wiring.	Kelly and Kimberley, Kenora, Ont.....	\$43,750 00
June 10	Belleville, Ontario School for the Deaf....	Supply and installation of two mechanical underfeed stokers.	The Riley Engineering and Supply Company, Toronto.....	3,200 00
July 4	Sudbury Gaol.....	Construction of Gaol Building. All trades excepting heating, plumbing and electric wiring.	Duncan Construction Co., Ltd., Sudbury, Ont.....	111,500 00
July 5	Stratford Normal School.....	Supply and delivery of fuel for the season, 1929-1930.	Andrew Johnston & Son, Stratford, Ont....	939 00
July 5	Belleville, Ontario School for Deaf.....	Supply of coal for the season, 1929-1930. . .	Conger Lehigh Coal Co., Ltd., Belleville, Ont.....	13,140 00
July 10	Sudbury, Court House, Gaol and Registry Office.	Supply and delivery of coal for season, 1929-1930.	Laberge Lumber Co., Ltd., Sudbury, Ont..	1,770 00
July 10	Port Arthur, Gaol, Court House, Registry Office, Gaoler's Residence.	Supply and delivery of coal for season, 1929-1930.	The Hogarth Coal Co. Ltd.....	2,339 00
July 11	Brantford, Ontario School for the Blind....	Supply and delivery of coal for season, 1929-1930.	The Welsh Fuel Co., Brantford, Ont.....	6,339 00
July 11	Hamilton, Normal School.....	Supply and delivery of coal for season, 1929-1930.	The Burton Coal Co., Hamilton, Ont.....	640 00
July 11	Ottawa, Normal School.....	Supply and delivery of fuel for season, 1929-1930.	John Heney & Son, Ottawa, Ont.....	2,631 00
July 17	Toronto, Parliament and Departmental Buildings, Government House, and Os- goode Hall.	Supply and delivery of anthracite and Can- nell Coal and Wood, for season 1929-1930.	The Doan Coal Co. Ltd., Toronto.....	2,243 00

July 17	Kenora, Court House, Gaol and Registry Office.	Supply and delivery of fuel for season, 1929-1930.	Kelly & Kimberley, Kenora, Ont.	2,108 25
July 17	London Normal School.	Supply and delivery of fuel for season, 1929-1930.	Hawken Coal Co., London, Ont.	1,165 00
July 17	Peterborough, Normal School.	Supply and delivery of fuel for season, 1929-1930.	Conger Lehigh Coal Co., Peterborough, Ont.	1,134 00
July 19	Toronto, Parliament and Departmental Buildings, Osgoode Hall and Normal School.	Supply and delivery of coal for season, 1929-1930.	Milnes Coal Co. Ltd., Toronto, Ont.	20,000 00
July 16	Ridgetown, Experimental Farm.	Construction to the extension to Agricultural School.	Warwick & Sons, Ridgetown, Ont.	35,187 00
July 19	Guelph, Ontario Agricultural College.	Installation of heating, plumbing and ventilating systems in New Horticultural Building.	Frederick Smith & Sons, Guelph, Ont.	15,150 00
July 22	Haileybury, Court House, Gaol and Registry Office.	Supply and Delivery of fuel for season, 1929-1930.	Conlin & Hogan, Haileybury, Ont.	2,161 00
July 23	Swastika, Mining Recorder's Office.	Additional vault accommodation and changes to lavatories.	Van Rassel Brothers, Cochrane, Ont.	1,510 00
July 24	Guelph, Ontario Agricultural College.	Electrical work for Horticultural Building.	R. E. Christie Electric Co., Guelph, Ont.	4,890 54
July 30	Kenora Gaol.	Supply and installation of steel cells and doors in gaol now under construction.	The Canada Wire & Iron Goods Co., Hamilton, Ont.	19,110 00
Aug. 12	Fort Frances, Court House, Gaol and Registry Office.	Supply and delivery of fuel for season, 1929-1930.	O. B. Flinders, Fort Frances, Ont.	1,134 50
Aug. 12	Monteith, Northern Academy.	Supply and delivery of fuel for season, 1929-1930.	John W. Fogg Ltd., Timmins, Ont.	1,740 00
Aug. 13	Guelph, Ontario Agricultural College.	Installation of cold storage system in New Horticultural Building.	Canadian Ice Machine Co., Toronto, Ont.	16,450 00
Aug. 20	Kenora Gaol.	Installation of heating, plumbing and ventilating systems.	H. O. Holden, Kenora, Ont.	18,710 00
Aug. 22	Kenora Gaol.	Installation of electric wiring and fixtures.	H. Cheyne.	2,078 55

STATEMENT No. 11—Continued

Showing the several contracts entered into with His Majesty during the twelve months ending the 31st of October, 1929, in connection with the Public Buildings and Works, subject to the control of the Public Works Department, Ontario

Date 1929	Work	Subject of Contract	Contractors	Amount
Aug. 26	Sault Ste. Marie, Court House and Gaol....	Supply and delivery of coal for season, 1929-1930.	J. McDonald, Sault Ste. Marie..... and	{ \$2,170 00 1,242 00
Sept. 10	Guelph, Ontario Agricultural College.....	Construction of sections 1 and 2, Administration Building, Students' Residence, power plant and tunnel.	Jackson-Lewis Co. Ltd., Toronto.....	595,000 00
Sept. 12	North Bay Gaol.....	Construction of new gaol, all trades, except heating, plumbing and electric wiring.	R. Wallace & Son, North Bay, Ont.....	104,213 00
Sept. 13	Sudbury Gaol.	Installation of steel cells, doors and grilles in gaol now under construction.	J. & J. Taylor Co. Ltd., Toronto.....	45,588 00
Sept. 20	Guelph Ontario Agricultural College.....	Repairs and alterations to Massey Library	Geo. C. Walker, Guelph, Ont.....	3,314 00
Sept. 25	Renfrew County.....	Widening of concrete bridge over Brennan's Creek at Old Killaloe.	M. J. Sulpher, Renfrew, Ont.....	2,950 00
Oct. 8	Belleville, Ontario School for the Deaf....	Construction of sewage pumping system from Ontario School for Deaf to the City of Belleville.	R. H. McGregor, Toronto.....	7,700 00
Oct. 3	Sudbury Gaol.....	Installation of the heating, plumbing and ventilating systems.	P. Morrison, Sudbury, Ont.....	31,350 00
Oct. 14	Sudbury Gaol.....	Installation of electrical works.....	Harris & Marson, Toronto.....	4,497 00
Sept. 24	Guelph, Ontario Agricultural College.....	Erection of brick radial chimney and power plant.	Frances Hankin & Co. Ltd., Toronto, Ont.	2,916 00

DIGBY HORRELL,

Secretary and Purchasing Agent.

STATEMENTS
OF THE
Accountant of Public Works
1929

Department of Public Works, Ontario,
Toronto, February 14th, 1930.

HONOURABLE GEO. S. HENRY,
Minister of Public Works and Highways.

SIR,—

I have the honour to submit detailed statements of Ordinary Expenditure of Civil Government and Maintenance and Repairs Government Buildings and Public Works; also Capital Expenditure on Provincial Public Buildings and Public Works, during the fiscal year which ended on the 31st of October, 1929.

I have the honour to be, Sir,

Your obedient servant,

C. KENTLETON,
Accountant, Public Works.

STATEMENT OF EXPENDITURE, CIVIL GOVERNMENT, MAINTENANCE AND
REPAIRS, GOVERNMENT BUILDINGS FOR YEAR ENDING
OCTOBER 31ST, 1929

ORDINARY

Civil Government

Salaries.....	\$67,914 17	
Contingencies.....	12,388 18	
Travelling expenses.....	2,377 09	
		\$82,679 44
<i>Maintenance and Repairs, Government Buildings</i>		
Government House:		
Salaries.....	\$17,575 00	
Pay lists—gardeners, firemen, repairs to grounds.....	3,626 34	
Water, fuel, light and power.....	9,242 78	
Repairs, contingencies, etc.....	9,781 48	
Furniture and furnishings.....	3,603 46	
Uniforms for messengers, etc.....	190 00	
Telephone service.....	797 04	
		44,816 10
Parliament and Departmental Buildings:		
Salaries.....	\$151,315 31	
Water and fuel.....	36,305 93	
Electric light, power and gas.....	23,492 10	
Supplies, tools, etc.....	4,393 29	
Caretakers of grounds and maintenance of grounds, etc.....	4,955 63	
Repairs and cleaning of buildings, etc.....	85,551 32	
Shelving for Library.....	160 00	
Vault fittings and shelving.....	4,957 42	
Furniture and furnishings for buildings.....	34,890 61	
Interior alterations.....	5,800 52	
Flowers, shrubs, plants, etc.....	2,988 18	
Uniforms for messengers.....	34 25	
Painting outside and inside work.....	12,666 23	
Telephone service.....	46,967 78	
Ground rent, 47 Queen's Park, Toronto.....	243 00	
Fire protection.....	202 80	
Rental, Government Offices, Spadina House.....	18,750 00	
Taxes, Spadina House.....	8,208 49	
		441,900 86

Osgoode Hall:			
Salaries.....	\$23,630	96	
Fuel, light, water and power.....	6,979	66	
Furniture and incidentals.....	2,115	34	
Telephone and telegraph service.....	3,851	26	
Cleaning of building.....	2,518	03	
Fire protection.....	24	05	
General repairs and alterations.....	10,388	43	
Electric wiring and fixtures.....	188	80	
Painting interior and exterior.....	2,633	18	
			\$52,329 71
Toronto Normal and Model Schools:			
Repairs, alterations, additions, etc.....	\$6,761	50	
Repairs to boilers and heating.....	21	95	
Improvements in lavatory accommodation.....	2,746	21	
Painting interior and exterior.....	1,315	01	
			10,844 67
Ottawa Normal and Model Schools:			
Repairs and incidentals.....	\$245	53	
Repairs to boilers, heating and plumbing.....	132	90	
			378 43
London Normal School:			
Repairs and incidentals.....	\$386	75	
Painting interior and exterior.....	350	00	
Repairs to heating and plumbing.....	198	85	
			935 60
Hamilton Normal School:			
Repairs and incidentals.....			170 43
Peterborough Normal School:			
Repairs and incidentals.....	\$240	80	
Repairs to heating and plumbing.....	161	75	
			402 55
Stratford Normal School:			
Repairs and incidentals.....	\$452	00	
Painting interior and exterior.....	600	00	
			1,052 00
North Bay Normal School:			
Repairs and incidentals.....	\$3,263	07	
Improvements of drains and renewals.....	375	00	
Repairs to heating and plumbing.....	167	04	
			3,805 11
Belleville School for the Deaf:			
Repairs and incidentals.....	\$1,614	86	
Repairs and improvements to heating plant.....	3,933	38	
Painting interior and exterior.....	172	00	
Repairs to sewage plant and duplicate pumping station.....	117	40	
Lockers for dormitories.....	920	00	
Water heater, Girls' Dormitory.....	489	75	
			7,247 39
Brantford School for the Blind:			
Repairs and incidentals.....	\$16,372	72	
Painting interior and exterior.....	2,291	94	
Water softener and piping for laundry.....	1,220	46	
			19,885 12
Sandwich Training School:			
Repairs and incidentals.....			485 18
Sturgeon Falls Training School:			
Repairs and incidentals.....			10 40
Embrum Training School:			
Installation of steam heating system.....			1,055 15
Northern Academy, Monteith:			
Repairs and incidentals.....			2,047 19
Ontario Agricultural College, Guelph:			
Repairs and incidentals.....	\$10,726	54	
Alterations to Massey Library.....	1,779	85	
Fittings for Library.....	2,480	00	
			14,986 39

Ontario Veterinary College:			
Repairs and incidentals.....			\$183 28
Horticultural Experimental Station, Vineland:			
Repairs and incidentals.....			3,388 81
Western Ontario Experimental Farm, Ridgetown:			
Repairs and incidentals.....			731 73
Eastern Dairy School, Kingston:			
Repairs and incidentals.....			3,226 00
Kemptville Agricultural School:			
Repairs and incidentals.....			2,843 30
Vimy Ridge Farm:			
Repairs and incidentals.....			130 38
DISTRICTS:			
Algoma District:			
Repairs and alterations.....	\$861	12	
Furniture and furnishings.....		396	00
Painting interior of Court House and Gaol.....		62	50
			<u>1,319 62</u>
Cochrane District:			
Repairs and alterations.....	\$1,286	60	
Painting interior and exterior of Court House.....		428	00
Furniture and furnishings.....		130	00
			<u>1,844 60</u>
Kenora District:			
Repairs and alterations.....	\$419	79	
Furniture and furnishings.....		177	06
Recovering roof of Court House.....		695	00
Painting interior and exterior.....		62	50
Furnishings for Court House.....		325	00
			<u>1,679 33</u>
Manitoulin District			
Repairs to Court House.....	\$298	38	
Furniture and furnishings.....		90	
Electric light installation and fixtures.....		695	00
			<u>994 28</u>
Muskoka District:			
Repairs to Court House.....	\$65	05	
Furniture and furnishings.....		2	50
			<u>67 55</u>
Nipissing District:			
Repairs and alterations to Court House.....	\$145	11	
Furniture and furnishings.....		255	02
			<u>400 13</u>
Parry Sound District:			
Repairs and alterations to Court House, Gaol, Registry Office, Land Titles Office and Lock-ups.....	\$1,286	85	
Furniture and furnishings.....		92	79
Painting interior and exterior of Court House, Registry Office and Gaol.....		582	52
Improvements in hot water supply.....		69	20
			<u>2,031 36</u>
Rainy River District:			
Repairs and alterations to Court House, Gaol and Registry Office	\$543	16	
Furniture and furnishings.....		1,115	64
Fittings for Registry Office.....		204	50
Alterations to Court House.....		1,500	00
			<u>3,363 30</u>

Sudbury District:			
Repairs and alterations to Court House, Gaol, Registry Office and Lock-ups.....		\$654 45	
Electric light, service and power.....		135 00	
Furniture and furnishings.....		530 15	
			\$1,319 60
Temiskaming District:			
Repairs and alterations to Court House, Gaol, Registry Office and Land Titles Office.....		\$799 02	
Furniture and furnishings.....		1,893 34	
Salary of caretaker, Ontario Government Building, New Liskeard.....		697 50	
			3,389 96
Thunder Bay District:			
Repairs and alterations to Court House, Gaol, Registry Office, Land Titles Office, Lock-ups, etc.....		\$2,338 69	
Furniture and furnishings.....		903 97	
Painting interior and exterior of Court House and Gaol.....		502 16	
			3,744 82
Miscellaneous:			
Salaries.....		\$44,666 64	
Automobiles, purchase, repairs, maintenance, equipment and service for all Departments of Government.....		37,876 93	
Services, travelling and other expenses.....		8,651 80	
Contingencies.....		7 50	
Motion Picture Bureau, Trenton, repairs and incidentals.....		980 00	
Insurance, including installation of lightning rods.....		18,856 26	
One-half cost of paving Old King's College Road.....		4,110 42	
Labour Employment Office, 45 Front St. W., Toronto, repairs and incidentals.....		272 09	
Labour Employment Office, 147 Church St., Toronto, repairs and incidentals.....		229 87	
Experimental Building, Stanley Park, Toronto, repairs and incidentals.....		45 90	
110 University Avenue, Toronto, repairs, alterations, painting and incidentals.....		1,155 63	
Ontario Government Building, Exhibition Park, Toronto, repairing and installing exhibits, electric energy and general repairs		19,988 65	
Local improvement taxes.....		19,986 48	
			156,828 17
<i>Public Works</i> —Bridges, etc.:			
Lockmasters', bridge tenders', caretakers', etc., salaries.....		\$5,227 00	
Maintenance, locks, dams, etc.....		26,535 59	
Surveys and inspections.....		5,100 61	
Equipment, instruments, etc.....		4,856 54	
Wages and expenses of Supervising Foremen.....		2,041 95	
			43,761 69
Total Ordinary Expenses, Maintenance and Repairs.....			\$916,279 53
PUBLIC WORKS, BRIDGES, ETC.			
Storage dams.....			26,738 66
Cutting and purchase of timber.....			1,252 53
<i>Municipal Bridges:</i>			
Baalim's Creek bridge.....		\$645 90	
Backwater bridge.....		400 75	
Baker Creek bridge.....		1,123 21	
Balaclava bridge, Grattton.....		271 30	
Bark Lake bridge.....		500 88	
Barrett Creek bridge.....		1,450 11	
Bastion Creek bridge, Cameron.....		373 20	
Bear Creek bridge.....		542 44	
Beaver Creek bridge, Kaladar.....		2,731 05	
Beaver Meadow bridge.....		119 70	
Black Bay Creek bridge, Bagot.....		4,124 58	
Black Creek bridge, Gurd.....		789 73	
Black River bridge, Shelbourne.....		609 77	

Municipal Bridges—Continued

Bolter Creek bridge, Himsworth.....	\$2,349 20
Bolsover bridge.....	60 55
Boom Creek bridge, Papineau.....	566 08
Booth Road bridge, East Ferris.....	1,316 57
Boundary bridge, Wollaston.....	1,026 89
Boyd's bridge, Rama.....	1,387 87
Buckshot bridge, Clarendon.....	1,875 36
Bull Creek bridge, Stanhope and Minden.....	1,817 03
Burk's bridge, Huntingdon.....	646 56
Bush's Bridge, Hinchinbroke.....	2,708 49
Buttermilk Falls bridge, Barrie.....	502 97
Calvin, Lauder T. L. bridge.....	546 72
Carmen Creek bridge, Camden.....	30 11
Cascade bridge, Parry Sound.....	3,000 00
Cochrane Creek bridge, North Algoma.....	645 54
Collin's Creek bridge, Admaston.....	625 83
Conley Creek bridge, Bromley.....	113 62
Cottage Road bridge.....	186 81
Dark Lake bridge, Cardiff.....	2,619 04
Dark Lake bridge, Wilberforce.....	233 64
Davidson bridge.....	596 54
Debel bridge, Stephenson.....	41 50
Deer Creek bridge, Cardiff.....	117 21
Diamond Lake bridge, Herschell.....	373 95
Dobb's Creek bridge, Brougham.....	39 25
Echo Creek bridge.....	249 86
Egan Creek bridge, Dunganon.....	307 62
Eganville Road bridge, Brudenell.....	135 90
Fifth Concession bridge, Eldon.....	208 35
Fish Creek bridge, Bedford.....	18 39
Fitzpatrick bridge.....	330 39
Flatted bridge, Wicklow.....	2,567 15
Fourth Concession bridge, Orillia.....	1,740 62
Gauthier Creek, East Ferris.....	551 23
Glennie bridge.....	351 15
Goullick bridge.....	100 02
Gowdie's bridge, Huntingdon.....	301 45
Graham Creek bridge, Chisholm.....	971 25
Grassy Bay bridge, Bagot.....	781 47
Green Creek bridge, Sherwood.....	255 50
Griffith Road bridge.....	1,070 35
Halliday Creek bridge, Bagot.....	399 03
Hane's Gully bridge, Chaffey.....	331 83
Head Lake bridge, Digby.....	1,756 22
Head River bridge, Wilberforce.....	182 40
Hearl Creek bridge, Papineau.....	284 31
Heenan bridge.....	637 66
Hill-Dalton bridge.....	6,172 32
Hobart bridge, Medonte.....	2,026 29
Hodgin's Creek bridge, Admaston.....	276 02
Hyde's Creek bridge, Denbigh.....	3,124 33
Irvine's bridge.....	604 07
Jackson's Creek bridge, Macauley.....	1,207 25
Jamieson bridge, Ross.....	2,097 19
Jenner bridge, Stephenson.....	681 63
Keating bridge, Bethune.....	835 59
Kelly Creek bridge, Admaston.....	301 05
L'Amable Creek bridge, Airy.....	1,812 59
Levesque Creek bridge, Chisholm.....	544 46
Lidke Creek bridge.....	201 50
Little East bridge, Chaffey.....	347 65
Little Madawaska bridge, Sherwood.....	761 06
Lot 7, bridge, Concession 2, Carden.....	484 35
Loughboro bridge.....	625 52
McDonald bridge, Dunganon.....	605 36
Malone Swamp bridge.....	675 09
Maple Leaf bridge.....	351 12
Marsh Creek bridge, Madoc.....	390 85
Martin bridge.....	303 00
Mathiasville bridge.....	1,168 30
Middle River bridge, McKellar.....	2,527 45

Municipal Bridges—Continued

Midlothian bridge, Ryerson.....	\$1,330 23
Moher Creek bridge.....	107 25
Morrison bridge.....	197 72
Ninth Concession bridge, Carden.....	606 49
Old Killaloe bridge, Hagarty.....	121 96
Opeongo Road bridge, Brudenell.....	72 99
Papineau Creek bridge, McClure.....	39 68
Parnham bridge, Tay.....	1,109 81
Pautash Lake bridge, Cardiff.....	49 14
Perch Creek bridge.....	596 69
Plevna Creek bridge, Clarendon.....	41 20
Porcher Creek bridge.....	687 18
Purbrook bridge.....	882 40
Reid's Creek bridge, Medonte.....	1,362 10
Reiss bridge, Herschell.....	553 50
Ridge Road bridge, Wollaston.....	196 50
Rockingham bridge.....	1,058 90
Rock Lake bridge, Storrington.....	3,715 30
Rollin's bridge, Madoc.....	613 47
Ross bridge, Madoc.....	513 35
Rosstrevor bridge, Watt.....	275 00
Rovies Creek bridge, Elziver.....	195 90
Ryan Road bridge, Carlow.....	678 59
St. Ola bridge, Limerick.....	509 82
Second Concession bridge, Carden.....	767 34
Sharbot Lake bridge, Oso.....	239 10
Side Line bridge, Himsworth.....	284 19
Sixth Concession bridge, Vespra.....	233 00
Smith Creek bridge, Brudenell.....	207 60
Smith's Mill bridge, Sheffield.....	1 90
Snake River bridge, Bromley.....	130 75
South Branch bridge, Bracebridge.....	2,105 37
Sproule River bridge, Sproule.....	1,071 47
Stephenson bridge.....	24 70
Stone's Lake bridge, Bagot.....	568 62
Thompson bridge, Elzevir.....	214 00
Townline bridge, Watt and Monck.....	1,057 93
Trolley bridge.....	72 50
Trudeau bridge, Hungerford.....	996 67
Turtle Creek bridge, Humphrey.....	2,173 50
Vardy Creek bridge, Camden.....	1,021 25
Wellman bridge, Marmora.....	334 26
Whalen Creek bridge, Brudenell.....	629 25
White Oak bridge, Humphrey.....	621 00
Whitewater Creek bridge, Bonfield.....	1,512 36
Wilberforce Creek, Monmouth.....	1,350 59
Wolf River bridge, Hardy.....	4,375 44
Wolf Stamp bridge, Portland.....	6,141 37
Young's bridge, Hungerford.....	3,458 86
Accountable Warrants outstanding.....	151 50

 \$124,835 83
Drainage:

Addington and Frontenac.....	\$4,640 94
Grey.....	857 25
Haliburton.....	3,793 67
Hastings North.....	3,950 27
Lanark.....	590 52
Muskoka.....	4,449 83
Nipissing.....	8,110 95
Ontario North.....	1,525 10
Parry Sound.....	2,977 41
Renfrew North.....	405 75
Renfrew South.....	2,476 87
Simcoe Centre.....	1,497 51
Simcoe East.....	3,465 47
Bruce North.....	1,213 28
Sauble River Clearing, Amabel.....	373 92

 40,328 74

<i>Municipal Bridges—Continued</i>		
<i>Drainage Aid—Grant:</i>		
Beaudette River Drain, Charlottenburg.....		\$10,000 00
Total Public Works, Bridges, Drainage, etc.....		\$246,917 45
<i>Public Buildings:</i>		
<i>Parliament Buildings:</i>		
To provide additional accommodation.....	\$34,935 22	
To provide additional accommodation for gardener.....	10,579 62	
		45,514 84
<i>Ontario Hospitals:</i>		
<i>Additions, alterations and equipment:</i>		
Brockville Hospital.....	\$940 00	
Cobourg Hospital.....	3,004 78	
Hamilton Hospital.....	6,898 85	
Kingston Hospital.....	127 83	
London Hospital.....	11,407 78	
Toronto Hospital.....	4,824 84	
		27,204 08
<i>Ontario Hospital, Brockville:</i>		
Laundry building and equipment.....		2,265 00
<i>Ontario Hospital, Hamilton:</i>		
Purchase and installation of laundry machinery and expenses in connection therewith.....	\$1,806 36	
New Infirmary Building, furniture, furnishings and expenses in connection therewith.....	104,957 57	
Equipment and furniture.....	2,377 00	
		109,140 93
<i>Ontario Hospital, Kingston:</i>		
Repair and remodelling of existing buildings, Mowat Wing, furniture and furnishings, etc.....		70,856 58
<i>Ontario Hospital, Mimico:</i>		
Installation of water service main.....		2,500 00
<i>Ontario Hospital, Orillia:</i>		
Purchase and installation of new laundry machinery.....		426 30
<i>Ontario Hospital, Woodstock:</i>		
New building to accommodate 400 patients, furniture and furnishings.....		274 00
<i>Boys' Training School, Bowmanville:</i>		
Purchase of land, construction of works and buildings, etc.....		121,059 55
<i>Psychiatric Hospital, Toronto:</i>		
Construction of tunnel and steam lines from East Block, Parliament Buildings		1,285 25
<i>Ontario Training College for Technical Teachers, Hamilton:</i>		
Construction of works and buildings, furniture and furnishings, etc.....		14,144 39
<i>Ontario Agricultural College, Guelph:</i>		
Rebuilding barn for Poultry Department.....	\$5,311 86	
Horticultural Building.....	49,998 14	
Administration building for boys residence.....	22,379 60	
Well pump, pump house, mains to increase water supply.....	9,855 55	
Enlargement main sewage plant.....	4,852 00	
		92,397 15
<i>Horticultural Experimental Station, Vineland:</i>		
Greenhouse.....	\$2,093 28	
House for staff.....	1,684 14	
Electric wiring and fixtures in greenhouse.....	1 00	
Double house for labourers.....	6,942 45	
		10,720 87
<i>Experimental Farm, Ridgetown:</i>		
Addition to school.....		1,498 00
<i>Vimy Ridge Farm:</i>		
Electric lighting system and wiring.....		2,093 99

Public Buildings—Continued

Kemptville Agricultural School:			
Dairy barn.....		\$6,093 83	
Addition to boys' dormitory.....		18,270 91	
			\$24,364 74
Kenora District:			
New gaol, Kenora.....			31,050 98
Nipissing District:			
New gaol, North Bay.....			7,071 71
Rainy River District:			
Completion of Registry Office, Fort Frances.....			470 97
Sudbury District:			
New gaol, Sudbury.....			65,497 93
Temiskaming District:			
Additional accommodation, Mining Recorder's Office, Swastika..	\$1,510 00		
Kirkland Lake, steel cells.....	3,557 00		
Lock-up at Englehart.....	5,452 56		
Lock-up at Gowganda.....	2,279 48		
			12,799 04
Miscellaneous:			
Ontario Government Building, Exhibition Park, Toronto, grant to City of Toronto.....	\$50,000 00		
Purchase of property.....	228,291 52		
Extension of steam main to Pathological Building, University of Toronto.....	2,148 83		
			280,440 35
Total Public Buildings.....			\$923,076 65
<i>Statutory:</i>			
Minister's salary.....	\$8,000 00		
Drainage aid work.....	60,478 00		
			68,478 00
Total Statutory.....			\$68,478 00
<i>Special Warrants:</i>			
School for Deaf, Belleville, equipment.....			2,490 50

SUMMARY

ORDINARY EXPENDITURE

Civil Government and Maintenance and repairs of Government Buildings and Public Works.....			911,745 38
STATUTORY			
Minister's salary.....			8,000 00
Total Ordinary Expenditure.....			\$919,745 38

CAPITAL EXPENDITURE

Bridges, drainage, etc.....	\$203,165 76		
Public Buildings.....	927,592 82		
STATUTORY			
Drainage aid grants.....		60,478 00	
SPECIAL WARRANTS			
Special Warrants.....		2,490 50	
Total Capital Expenditure.....			1,193,717 08
Grand Total.....			\$2,113,462 46

C. KENTLETON,
Accountant.

NINTH
ANNUAL REPORT
OF THE
MINIMUM WAGE BOARD
1929

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 14, 1930



1972

THE UNITED PRESS

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TO HIS HONOUR WILLIAM D. ROSS, ESQ.,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to Your Honour the Ninth Annual Report of the Minimum Wage of Ontario for the year 1929.

Respectfully submitted,

FORBES GODFREY,
Minister of Health and Labour.

THE HONOURABLE FORBES GODFREY, M.D.,
Minister of Labour,
Parliament Buildings, Toronto.

SIR:—I have the honour to submit herewith the Ninth Annual Report of the Minimum Wage Board.

I have the honour to be,

Sir,

Your obedient servant,

J. W. MACMILLAN,
Chairman.

ANNUAL REPORT

MINIMUM WAGE BOARD, 1929

In this, the ninth annual report of the Minimum Wage Board, we wish to acknowledge the support which has been given us from all quarters. The principle that the woman who works shall live from her work is valid everywhere. We have been in the happy position of serving as a centre where employers, employees and the general public can unite and agree. Thus there is behind the law we administer the driving force of an unanimous public sentiment. As in all former reports we gratefully record our appreciation of the spontaneous and universal approval which is constantly with us.

These nine years have increasingly revealed the need of crystallizing this principle in legislation. No one who has not studied the matter knows the great disparities as between the wages and conditions of employment in different business establishments. It is idle to talk of average wages in respect to the problem we face. An average wage may include and hide a shamefully low wage if it be counterbalanced by an uncommonly high wage. Thus the unsocial competitor is shielded by the worthy employer whose superior standards, and perhaps whose business success, he threatens. Nor do general comparisons of wages as between two cities or two provinces mean anything to our work. There are wages of all sorts in every city and in every province.

There always tend to be unsocially low wages. In the ceaseless flux of modern business nothing remains at rest. This Board is in the same position as any manager of a store or factory, and must be on the job every day. Fresh situations are forever arising. Some firms are going out of business, while others are starting up. Some of the latter need to be taught that remorseless wage-cutting is not the only way to get ahead.

We have also learned the truth of the ancient maxim, that a law is never better than its enforcement. Hence we have tried to work out methods by which, without developing a too elaborate and expensive system of inspection, we might extend this protection wherever it is needed in Ontario. By means of the collection, analysis, and correction of wage sheets we have attained this goal for a very large proportion of the hundred thousand women who are gainfully employed in Ontario. When we add to this prompt and effective dealing with all complaints we receive, in which we have the hearty co-operation of the Factory Inspection Department, we feel that our orders are known and obeyed within the provincial boundaries. No law is entirely without breach, but the standards prevail.

COST OF LIVING BUDGET

The budget for an independent working woman in Toronto, as revised in October, 1929, representing the lowest wage upon which she can support herself, is as follows:—

Item	October 1929	Cost per year
Board and lodging at \$7.00 per week.....		\$364 00
CLOTHING:		
Footwear and repairs, 3 pairs \$5.00, \$4.00, \$4.00; bedroom slippers, \$1.25, rubbers or goloshes \$3.00, repairs \$2.00.....		\$19 25
Stockings.....		10 00
Underwear.....		8 50
Nightgowns.....		4 00
Costume slips and bloomers.....		5 00
Corsets and brassieres.....		5 50
Kimona (two years).....		1 00
Hats.....		11 00
Suit (half cost to wear two years) or skirt (one year, \$5.00) and light coat (two years, \$12.50).....		11 25
Winter coat to wear two years.....		8 25
Winter dresses.....		10 00
Summer dresses, two or three.....		12 00
Shirt waists.....		8 50
Sweater (two years).....		2 00
Aprons.....		2 50
Handkerchiefs.....		2 00
Gloves.....		4 00
Scarf.....		1 00
Umbrella, to last two years.....		1 25
		\$127 00
Forward.....		\$491 00
SUNDRIES:		
Laundry.....		\$39 00
Doctor, dentist, optician.....		20 00
Carfare.....		39 00
Reading matter.....		6 00
Postage and stationery.....		5 00
Recreation and amusement.....		23 00
Church and charity.....		10 00
Incidentals, including tooth brush, comb, soap, tooth paste, talcum powder, nail file, shoe polish, hand lotion, pins, needles, thread, whisk, shoe laces, etc.....		20 00
		\$162 00
Total expenses for sundries.....		\$162 00
Total expenses for year.....		\$653 00
Board and lodging per week.....		\$7 00
Clothing per week.....		2 44
Sundries per week.....		3 06
Total per week.....		\$12 50

COMPARATIVE STATISTICS

The Board collects each year reports of wages and hours. During the first years of its operations it was able to include in this statement the returns of each successive year. Now, however, with nine years of activity behind us, we are forced to be content with less exhaustive statistics. It seems best to make the comparison between the first collection of returns and the latest. The two columns thus show, with two exceptions, wages and hours before the order went into force in contrast with the year 1929. The two exceptions are in the Food and Paper trades, each of which was subjected to a reclassification in 1925, which made it impracticable to exhibit such a contrast. Orders 34 (Food) and 39 (Paper) therefore show the two years 1926 and 1929. In these two cases there is no contrast between "before and after taking."

ORDER NO. 31

This order deals with laundries, dye-works and dry-cleaning establishments. It incorporates and supersedes Orders 1, 4 and 5.

In the City of Toronto:

	1921	1929
Number of firms reporting.....	33	51
Total number of female employees.....	706	1,736
Over 18 years.....	638	1,573
Under 18 years.....	68	163
Total weekly wages.....	\$8,888 94	\$23,478 63
Over 18 years.....	8,253 94	21,504 74
Under 18 years.....	635 00	1,973 89
Average Weekly wage.....	12 59	13 52
Over 18 years.....	12 93	13 66
Under 18 years.....	9 33	12 11
Percentage of young girls under 18 years.....	9.6	9.3
Percentage of married women.....	.....	31.5
Average hours worked per week.....	44.8	46.1

Weekly rate of wages:	1921	1929
Under \$7 00.....	1	....
7- 8.....	1	....
8- 9.....	8	1
9-10.....	33	30
10-11.....	65	106
11-12.....	72	99
12-13.....	168	710
13-14.....	106	250
14-15.....	89	148
15-16.....	68	138
16-18.....	51	88
18-20.....	20	56
20-22.....	16	61
22-up.....	8	49
Total.....	706	1,736

In cities of more than 30,000 population, excepting Toronto:

	1921	1929
Number of firms reporting.....	26	48
Total number of female employees.....	412	669
Over 18 years.....	359	615
Under 18 years.....	53	54

Total weekly wages.....	\$4,825 40	\$8,655 40
Over 18 years.....	4,322 60	8,142 65
Under 18 years.....	502 80	512 75
Average weekly wages.....	\$11 71	\$12 93
Over 18 years.....	12 04	13 39
Under 18 years.....	9 48	9 49
Percentage of young girls under 18.....	12.8	8.
Percentage of married women.....	.....	27.9
Average hours worked per week.....	47.2	48.3

Weekly rate of wages:	1921	1929
Under \$7 00.....	7	....
7- 8.....	13	9
8- 9.....	47	11
9-10.....	50	10
10-11.....	54	57
11-12.....	46	46
12-13.....	56	261
13-14.....	43	101
14-15.....	24	45
15-16.....	30	44
16-18.....	14	27
18-20.....	16	18
20-22.....	4	19
22-up.....	8	21
Total.....	412	669

In places having less than 30,000 population:

	1921	1929
Number of firms reporting.....	33	61
Total number of female employees.....	317	618
Over 18 years.....	228	532
Under 18 years.....	89	86
Total weekly wages.....	\$3,395 56	\$7,269 61
Over 18 years.....	2,594 96	6,358 00
Under 18 years.....	800 60	911 61
Average weekly wages.....	10 71	11 76
Over 18 years.....	11 38	11 95
Under 18 years.....	8 99	10 60
Percentage of young girls under 18.....	28 07	13.9
Percentage of married women.....	.....	23.9
Average hours worked per week.....	50.6	50.

Weekly rate of wages.....	1921	1929
Under \$7 00.....	6	....
7- 8.....	20	17
8- 9.....	70	21
9-10.....	39	87
10-11.....	39	71
11-12.....	32	172
12-13.....	48	115
13-14.....	22	46
14-15.....	14	23
15-16.....	15	29
16-18.....	4	12
18-20.....	2	12
20-22.....	6	11
22-up.....	....	2
Total.....	317	618

ORDERS NOS. 3, 6, 10, 29

Retail Stores

These govern saleswomen in retail stores. The leading chain store systems are included as well as a number of typical stores individually operated. It is a practical impossibility to gather returns from all the retail stores, so the endeavour is made to present a picture which may be taken as generally showing the situation and trend in the several parts of the Province.

ORDER No. 3

In the City of Toronto:

	1921	1929
Number of stores reporting.....	13	179
Total number of female employees.....	391	1,357
Over 18 years.....	349	1,245
Under 18 years.....	42	112
Total weekly wages.....	\$5,179. 50	\$21,614. 17
Over 18 years.....	4,693. 50	20,285. 17
Under 18 years.....	486. 00	1,329. 00
Average weekly wages.....	13. 25	15. 93
Over 18 years.....	13. 44	16. 30
Under 18 years.....	11. 57	10. 97
Percentage of young girls under 18 years.....	10. 7	6. 3
Percentage of married women.....	.....	16. 5
Average hours worked per week.....	49	48. 7
Weekly rate of wages:	1921	1929
Under \$7. 00.....	4	.....
7- 8.....	9	.....
8- 9.....	..	1
9-10.....	9	4
10-11.....	15	25
11-12.....	46	29
12-13.....	109	271
13-14.....	53	104
14-15.....	46	153
15-16.....	35	216
16-18.....	30	192
18-20.....	14	174
20-22.....	10	88
22-up.....	11	100
Total.....	391	1,357

ORDER No. 6

In cities of 30,000 or over, excepting Toronto:

	1921	1929
Number of stores reporting.....	26	103
Total number of female employees.....	1,123	1,909
Over 18 years.....	930	1,775
Under 18 years.....	193	134
Total weekly wage.....	\$14,045. 00	\$26,919. 50
Over 18 years.....	12,425. 50	25,555. 50
Under 18 years.....	1,619. 50	1,364. 00
Average weekly wages.....	12. 50	13. 81
Over 18 years.....	13. 36	14. 09
Under 18 years.....	8. 39	10. 33
Percentage of young girls under 18.....	17. 1	8. 2
Percentage of married women.....	.....	3. 9
Average hours worked per week.....	48.	48.

	1921	1929
Weekly rate of wages:.....	37	....
Under \$7 00.....	31	....
7- 8.....	127	22
8- 9.....	78	26
9-10.....	185	174
10-11.....	77	73
11-12.....	188	613
12-13.....	67	182
13-14.....	65	160
14-15.....	115	238
15-16.....	49	146
16-18.....	34	85
18-20.....	29	68
20-22.....	41	122
22-up.....		
Total.....	1,123	1,909

ORDER No. 10

In towns and cities from 5,000 to 30,000 population:

	1921	1929
Number of stores reporting.....	103	183
Total number of female employees.....	1,171	2,078
Over 18 years.....	1,052	1,818
Under 18 years.....	119	260
Total weekly wages.....	\$14,695 36	\$26,693 40
Over 18 years.....	13,876 36	24,249 90
Under 18 years.....	819 00	2,443 50
Average weekly wages.....	12 55	12 59
Over 18 years.....	13 19	13 01
Under 18 years.....	7 72	9 42
Percentage of young girls under 18.....	10.1	13.5
Percentage of married women.....	....	6.5
Average hours worked per week.....	50.1	48.5

	1921	1929
Weekly rate of wages:	63	2
Under \$7 00.....	45	18
7- 8.....	74	61
8- 9.....	107	235
9-10.....	166	294
10-11.....	73	347
11-12.....	171	350
12-13.....	38	100
13-14.....	54	113
14-15.....	127	170
15-16.....	83	167
16-18.....	47	85
18-20.....	57	45
20-22.....	66	91
22-up.....		
Total.....	1,171	2,078

In places under 5,000 population:

	1921	1929
Number of stores reporting.....	29	101
Total number of female employees.....	149	437
Over 18 years.....	140	389
Under 18 years.....	9	48
Total weekly wages.....	\$ 1,772 65	\$5,058 75
Over 18 years.....	1,693 15	4,616 25
Under 18 years.....	79 50	442 50
Average weekly wages.....	11 89	11 68
Over 18 years.....	12 09	11 96
Under 18 years.....	8 83	8 94
Percentage of young girls under 18.....	6.	9.8
Percentage of married women.....	....	8.5
Average hours worked per week.....	52.5	48.7

Weekly rate of wages:	1921	1929
Under \$7 00.....	11	5
7- 8.....	9	4
8- 9.....	10	34
9-10.....	12	55
10-11.....	28	107
11-12.....	12	52
12-13.....	22	70
13-14.....	4	23
14-15.....	4	27
15-16.....	11	22
16-18.....	3	12
18-20.....	7	12
20-22.....	8	9
22-up.....	8	5
Total.....	149	437

ORDER NO. 29

This order governs departmental stores in Toronto having more than 150 employees. It covers saleswomen and the mail order employees, but not the restaurant or operative employees.

Number of firms reporting.....	1921	1929
Total number of female employees.....	3	2
Over 18 years.....	2,782	4,916
Under 18 years.....	406	616
Total weekly wages.....	\$38,580 50	\$74,410 00
Over 18 years.....	34,648 00	68,363 00
Under 18 years.....	3,932 50	6,047 00
Average weekly wages.....	13 86	15 14
Over 18 years.....	14 58	15 90
Under 18 years.....	9 68	9 81
Percentage of young girls under 18.....	14.6	12.5
Percentage of married women.....	....	24.5
Average hours worked per week.....	47	48

Weekly rate of wages:	1921	1929
Under \$7 00.....	....	....
7- 8.....	10	4
8- 9.....	178	412
9-10.....	171	281
10-11.....	101	178
11-12.....	71	94
12-13.....	309	333
13-14.....	324	623
14-15.....	393	504
15-16.....	398	641
16-18.....	428	736
18-20.....	181	447
20-22.....	111	249
22-up.....	107	414
Total.....	2,782	4,916

ORDERS NOS. 13, 14, 15, 16

The Textile Trades

These are the factories engaged in knitting, weaving and spinning operations.

ORDER No. 13

In the City of Toronto:

	1922	1929
Number of firms reporting.....	31	43
Total number of female employees.....	1,773	2,835
Over 18 years.....	1,482	2,552
Under 18 years.....	291	283
Total weekly wages.....	\$23,757 45	\$40,264 55
Over 18 years.....	20,817 13	37,144 42
Under 18 years.....	2,940 32	3,120 13
Average weekly wages.....	13 39	14 20
Over 18 years.....	14 04	14 56
Under 18 years.....	10 10	11 03
Percentage of young girls under 18.....	16.4	9.9
Percentage of married women.....	.....	25.3
Average hours worked per week.....	45.5	46.2
Weekly rate of wages:	1922	1929
Under \$7 00.....	10	1
7- 8.....	14	6
8- 9.....	20	93
9-10.....	55	101
10-11.....	131	207
11-12.....	161	180
12-13.....	262	490
13-14.....	184	294
14-15.....	198	341
15-16.....	178	261
16-18.....	255	385
18-20.....	200	277
20-22.....	74	130
22-up.....	31	69
Total.....	1,773	2,835

ORDER No. 14

In cities of 30,000 population or over, excepting Toronto:

	1922	1929
Number of firms reporting.....	20	27
Total number of female employees.....	2,173	4,273
Over 18 years.....	1,555	3,819
Under 18 years.....	618	454
Total weekly wages.....	\$26,768 24	\$63,613 03
Over 18 years.....	20,547 53	58,394 06
Under 18 years.....	6,220 71	5,218 97
Average weekly wages.....	12 32	14 89
Over 18 years.....	13 21	15 29
Under 18 years.....	10 06	11 50
Percentage of young girls under 18.....	28.4	10.6
Percentage of married women.....	.....	19.3
Average hours worked per week.....	48.1	48.7
Weekly rate of wages:	1922	1929
Under \$7 00.....	30	.....
7- 8.....	77	5
8- 9.....	156	99
9-10.....	194	207
10-11.....	284	256
11-12.....	215	412
12-13.....	293	398
13-14.....	216	481
14-15.....	202	308
15-16.....	189	353
16-18.....	180	1,117
18-20.....	89	328
20-22.....	28	165
22-up.....	20	144
Total.....	2,173	4,273

ORDER NO. 15

Textile factories in cities and towns of from 5,000 to 30,000 population:

	1922	1929
Number of firms reporting.....	53	67
Total number of female employees.....	3,451	6,245
Over 18 years.....	2,540	4,912
Under 18 years.....	911	1,333
Total weekly wages.....	\$41,539 16	\$82,486 56
Over 18 years.....	33,557 54	68,746 57
Under 18 years.....	7,981 62	13,739 99
Average weekly wages.....	12 03	13 21
Over 18 years.....	13 21	14 00
Under 18 years.....	8 76	10 31
Percentage of young girls under 18 years.....	26.4	21.3
Percentage of married women.....	.....	19.6
Average hours worked per week.....	49.1	50.3
Weekly rate of wages:	1922	1929
Under \$7 00.....	94	10
7- 8.....	168	160
8- 9.....	275	311
9-10.....	366	527
10-11.....	466	685
11-12.....	370	753
12-13.....	435	971
13-14.....	348	849
14-15.....	322	464
15-16.....	162	387
16-18.....	227	590
18-20.....	138	245
20-22.....	45	119
22-up.....	35	174
Total.....	3,451	6,245

ORDER NO. 16

Textile factories in places having less than 5,000 urban population:

	1922	1929
Number of firms reporting.....	60	62
Total number of female employees.....	2,237	2,577
Over 18 years.....	1,813	2,136
Under 18 years.....	424	441
Total weekly wages.....	\$24,982 02	\$32,767 58
Over 18 years.....	21,622 79	28,550 24
Under 18 years.....	3,359 23	4,217 34
Average weekly wages.....	11 17	12 72
Over 18 years.....	11 93	13 37
Under 18 years.....	7 92	9 56
Percentage of young girls under 18.....	18.9	17.1
Percentage of married women.....	.....	22.3
Average hours worked per week.....	51.4	51.4
Weekly rate of wages:	1922	1929
Under \$7 00.....	123	25
7- 8.....	79	48
8- 9.....	217	183
9-10.....	249	307
10-11.....	392	384
11-12.....	302	346
12-13.....	211	264
13-14.....	347	247
14-15.....	86	358
15-16.....	73	125
16-18.....	78	148
18-20.....	47	74
20-22.....	19	36
22-up.....	14	32
Total.....	2,237	2,577

ORDERS NOS. 17, 18, 19, 20

The Needle Trades

These are the factories whose chief implement is the sewing machine.

ORDER NO. 17

In the City of Toronto:

	1922	1929
Number of firms reporting.....	269	465
Total number of female employees.....	7,187	9,663
Over 18 years.....	6,676	9,064
Under 18 years.....	511	599
Total weekly wages.....	\$97,958 39	\$151,899 02
Over 18 years.....	93,897 65	145,726 98
Under 18 years.....	4,060 74	6,172 04
Average weekly wages.....	13 63	15 72
Over 18 years.....	14 06	16 08
Under 18 years.....	7 95	10 30
Percentage of young girls under 18.....	7.1	6.19
Percentage of married women.....	.....	22.8
Average hours worked per week.....	44.2	44.1
	1922	1929
Weekly rate of wages:		
Under \$7.00.....	99	14
7- 8.....	72	43
8- 9.....	150	239
9-10.....	190	222
10-11.....	532	472
11-12.....	471	526
12-13.....	870	1,750
13-14.....	1,390	1,031
14-15.....	353	610
15-16.....	592	875
16-18.....	731	1,183
18-20.....	600	875
20-22.....	371	596
22-up.....	766	1,227
Total.....	7,187	9,663

ORDER NO. 18

Needle trade factories in cities of 30,000 population or over, excepting Toronto:

	1922	1929
Number of firms reporting.....	51	83
Total number of female employees.....	874	978
Over 18 years.....	811	910
Under 18 years.....	63	68
Total weekly wages.....	\$11,764 27	\$14,265 40
Over 18 years.....	11,229 17	13,561 82
Under 18 years.....	535 10	703 58
Average weekly wages.....	13 46	14 59
Over 18 years.....	13 84	14 90
Under 18 years.....	8 49	10 35
Percentage of young girls under 18.....	7.2	6.9
Percentage of married women.....	.....	32.6
Average hours worked per week.....	45.1	46.4

Weekly rate of wages:..	1922	1929
Under \$7 00.....	40	...
7- 8.....	39	6
8- 9.....	48	38
9-10.....	49	70
10-11.....	72	58
11-12.....	69	125
12-13.....	85	121
13-14.....	74	99
14-15.....	78	76
15-16.....	66	81
16-18.....	105	101
18-20.....	76	76
20-22.....	41	45
22-up.....	32	82
Total.....	874	978

ORDER NO. 19

Needle trade factories in cities and towns of from 5,000 to 30,000 population:

	1922	1929
Number of firms reporting.....	37	58
Total number of female employees.....	1,157	1,965
Over 18 years.....	954	1,778
Under 18 years.....	203	187
Total weekly wages.....	\$13,599 09	\$27,381 93
Over 18 years.....	12,310 26	25,478 83
Under 18 years.....	1,288 83	1,903 10
Average weekly wages.....	11 75	13 93
Over 18 years.....	12 90	14 33
Under 18 years.....	6 34	10 18
Percentage of young girls under 18.....	17.5	9.5
Percentage of married women.....	...	17.6
Average hours worked per week.....	46.9	46.9

Weekly rate of wages:	1922	1929
Under \$7.00.....	83	7
7- 8.....	97	44
8- 9.....	95	59
9-10.....	89	168
10-11.....	118	179
11-12.....	95	209
12-13.....	105	246
13-14.....	91	180
14-15.....	109	157
15-16.....	57	171
16-18.....	158	224
18-20.....	33	167
20-22.....	15	72
22-up.....	12	82
Total.....	1,157	1,965

ORDER NO. 20

Needle trade factories in places having less than 5,000 urban population

	1922	1929
Number of firms reporting.....	10	23
Total number of female employees.....	107	258
Over 18 years.....	100	231
Under 18 years.....	7	27
Total weekly wages.....	\$999 09	\$3,610 59
Over 18 years.....	938 11	3,378 43
Under 18 years.....	60 98	232 16
Average weekly wages.....	9 33	13 99
Over 18 years.....	9 38	14 63
Under 18 years.....	8 71	8 60
Percentage of young girls under 18.....	6.5	10.4
Percentage of married women.....	...	31.7
Average hours worked per week.....	47.5	47.1

Weekly rate of wages:	1922	1929
Under \$7.00.....	24	3
7- 8.....	10	11
8- 9.....	13	25
9-10.....	25	19
10-11.....	13	34
11-12.....	2	28
12-13.....	7	37
13-14.....	3	15
14-15.....	2	11
15-16.....	3	16
16-18.....	3	15
18-20.....	.....	4
20-22.....	1	2
22-up.....	1	38
Total.....	107	258

ORDERS NOS. 21, 22, 23, 24

These govern wages in the following trades: Drugs, chemicals, pharmaceutical or toilet preparations, dyes, inks, shoe blacking or polish, mucilage, medicines, non-corrosive acids and non-hazardous chemicals or chemical preparations.

ORDER No. 21

In the City of Toronto:

	1923	1929
Number of firms reporting.....	58	83
Total number of female employees.....	635	845
Over 18 years.....	511	741
Under 18 years.....	124	104
Total weekly wages.....	\$8,169 92	\$12,607 92
Over 18 years.....	6,824 45	11,485 91
Under 18 years.....	1,345 47	1,122 01
Average weekly wages.....	12 86	14 92
Over 18 years.....	13 35	15 50
Under 18 years.....	10 85	10 79
Percentage of young girls under 18.....	19.5	12.3
Percentage of married women.....	14.6	15.9
Average hours worked per week.....	44.3	43.9

Weekly rate of wages:	1923	1929
Under \$7.00.....	4	.....
7- 8.....	4	1
8- 9.....	13	15
9-10.....	26	26
10-11.....	79	62
11-12.....	50	45
12-13.....	154	158
13-14.....	86	85
14-15.....	101	104
15-16.....	49	88
16-18.....	35	128
18-20.....	14	40
20-22.....	7	30
22-up.....	13	63
Total.....	635	845

ORDER No. 22

In cities of 30,000 population or over, excepting Toronto:

	1923	1929
Number of firms reporting.....	25	26
Total number of female employees.....	213	248
Over 18 years.....	172	214
Under 18 years.....	41	34
Total weekly wages.....	\$2,768 71	\$3,494 75
Over 18 years.....	2,291 56	3,125 45
Under 18 years.....	477 15	369 30
Average weekly wages.....	12 99	14 09
Over 18 years.....	13 32	14 60
Under 18 years.....	11.63	10 86
Percentage of young girls under 18.....	19.2	13.7
Percentage of married women.....	8.	14.1
Average hours worked per week.....	45.	44.3
Weekly rate of wages:	1923	1929
Under \$7 00.....	....	....
7- 8.....	3	....
8- 9.....	24	2
9-10.....	24	20
10-11.....	17	27
11-12.....	34	36
12-13.....	19	43
13-14.....	28	21
14-15.....	17	22
15-16.....	10	17
16-18.....	14	22
18-20.....	11	12
20-22.....	5	9
22-up.....	7	17
Total.....	213	248

ORDER No. 23

In cities and towns of from 5,000 to 30,000 population:

	1923	1929
Number of firms reporting.....	15	12
Total number of female employees.....	207	154
Over 18 years.....	174	147
Under 18 years.....	33	7
Total weekly wages.....	\$2,673 65	\$2,591 10
Over 18 years.....	2,287 94	2,518 77
Under 18 years.....	385 71	72 33
Average weekly wages.....	12 92	16 83
Over 18 years.....	13 15	17 13
Under 18 years.....	11 69	10 33
Percentage of young girls under 18.....	15.9	4.5
Percentage of married women.....	2.9	6.4
Average hours worked per week.....	44.5	43.7
Weekly rate of wages:	1923	1929
Under \$7.00.....	....	....
7- 8.....	1	....
8- 9.....	3	2
9-10.....	11	....
10-11.....	12	5
11-12.....	56	24
12-13.....	26	10
13-14.....	25	11
14-15.....	17	7
15-16.....	14	13
16-18.....	35	32
18-20.....	4	16
20-22.....	1	10
22-up.....	2	24
Total.....	207	154

ORDER NO. 24

In places having less than 5,000 urban population:

	1923	1929
Number of firms reporting.....	14	13
Total number of female employees.....	174	138
Over 18 years.....	146	132
Under 18 years.....	28	6
Total weekly wages.....	\$1,805 47	\$1,720 95
Over 18 years.....	1,559 07	1,663 20
Under 18 years.....	246 40	57 75
Average weekly wages.....	10 38	12 47
Over 18 years.....	10 68	12 60
Under 18 years.....	8 80	9 63
Percentage of young girls under 18.....	16 09	4.3
Percentage of married women.....	3.45	12.3
Average hours worked per week.....	46.2	47.
Weekly rate of wages:	1923	1929
Under \$7.00.....	....	....
7- 8.....	35	....
8- 9.....	14	20
9-10.....	56	5
10-11.....	23	31
11-12.....	12	17
12-13.....	9	21
13-14.....	3	12
14-15.....	5	3
15-16.....	5	8
16-18.....	3	5
18-20.....	4	3
20-22.....	2	4
22-up.....	3	9
Total.....	174	138

ORDER NO. 28

These are the factories engaged in the boot and shoe and other leather trades:

In the City of Toronto:

	1923	1929
Number of firms reporting.....	28	41
Total number of female employees.....	381	702
Over 18 years.....	299	580
Under 18 years.....	82	122
Total weekly wages.....	\$5,519 98	\$10,519 31
Over 18 years.....	4,674 65	9,404 87
Under 18 years.....	845.33	1,114 44
Average weekly wage.....	14 48	14 98
Over 18 years.....	15 64	16 20
Under 18 years.....	10 31	9 15
Percentage of young girls under 18.....	21.5	17.3
Percentage of married women.....	21.8	24.5
Average hours worked per week.....	45.1	44.9
Weekly rate of wages:	1923	1929
Under \$7 00.....	....	....
7- 8.....	8	....
8- 9.....	21	63
9-10.....	25	24
10-11.....	30	59
11-12.....	12	24
12-13.....	39	87
13-14.....	21	43
14-15.....	24	64
15-16.....	41	59
16-18.....	47	85
18-20.....	45	91
20-22.....	47	60
22-up.....	21	43
Total.....	381	702

The same trades in cities over 30,000, excepting Toronto:

	1923	1929
Number of firms reporting.....	5	11
Total number of female employees.....	107	212
Over 18 years of age.....	97	188
Under 18 years.....	10	24
Total weekly wages.....	\$1,626 07	3,396 83
Over 18 years.....	1,522 37	3,175 89
Under 18 years.....	103 70	220 94
Average weekly wages.....	15 19	16 02
Over 18 years.....	15 69	16 89
Under 18 years.....	10 37	9 20
Percentage of girls under 18.....	9.3	8.8
Percentage of married women.....	33.6	24.
Average hours worked per week.....	47	47.5

Weekly rate of wages:	1923	1929
Under \$7.00.....	1	1
7- 8.....	....	1
8- 9.....	4	2
9-10.....	4	28
10-11.....	9	12
11-12.....	6	15
12-13.....	8	13
13-14.....	16	9
14-15.....	6	13
15-16.....	12	20
16-18.....	15	29
18-20.....	10	23
20-22.....	6	24
22-up.....	10	22
Total.....	107	212

The same trades in towns and cities of from 5,000 to 30,000 population:

	1923	1929
Number of firms reporting.....	28	32
Total number of female employees.....	544	780
Over 18 years.....	443	615
Under 18 years.....	101	165
Total weekly wages.....	\$7,003 32	\$11,210 69
Over 18 years.....	6,058 87	9,512 37
Under 18 years.....	944 45	1,635 32
Average weekly wages.....	12 87	14 37
Over 18 years.....	13 67	15 56
Under 18 years.....	9 35	9 93
Percentage of young girls under 18.....	18.5	21.2
Percentage of married women.....	14.9	23.3
Average hours worked per week.....	49.2	48.9

Weekly rate of wages:	1923	1929
Under \$7.00.....	15	...
7- 8.....	18	37
8- 9.....	46	38
9-10.....	24	51
10-11.....	57	77
11-12.....	29	61
12-13.....	131	83
13-14.....	42	53
14-15.....	23	45
15-16.....	39	58
16-18.....	41	100
18-20.....	41	70
20-22.....	19	51
22-up.....	19	56
Total.....	544	780

The same trades in places under 5,000 population:

	1923	1929
Total number of firms reporting.....	17	23
Total number of female employees.....	335	576
Over 18 years.....	275	466
Under 18 years.....	60	110
Total weekly wages.....	\$3,737 14	\$7,166 67
Over 18 years.....	3,226 47	6,097 96
Under 18 years.....	510 67	1,068 71
Average weekly wages.....	11.15	12.44
Over 18 years.....	11.73	13.09
Under 18 years.....	8 51	9 71
Percentage of young girls under 18.....	17.9	19.1
Percentage of married women.....	10.7	13.2
Average hours worked per week.....	48.8	49.8
Weekly rate of wages:	1923	1929
Under \$7.00.....	28	5
7- 8.....	29	27
8- 9.....	34	40
9-10.....	42	67
10-11.....	44	85
11-12.....	35	62
12-13.....	34	73
13-14.....	18	47
14-15.....	16	35
15-16.....	12	34
16-18.....	27	37
18-20.....	5	28
20-22.....	5	17
22-up.....	6	19
Total.....	335	576

ORDER No. 30

These factories make electrical goods:

In the City of Toronto:

	1923	1929
Number of firms reporting.....	8	23
Total number of female employees.....	593	888
Over 18 years.....	488	747
Under 18 years.....	105	141
Total weekly wages.....	\$7,668 87	\$13,191 48
Over 18 years.....	6,582 59	11,375 41
Under 18 years.....	1,086 28	1,816 07
Average weekly wages.....	12.93	14.86
Over 18 years.....	13 49	15.23
Under 18 years.....	10 34	12 88
Percentage of young girls under 18.....	17.7	15.8
Percentage of married women.....	16.6	7.2
Average hours worked per week.....	47.	45.7
Weekly rate of wages:	1923	1929
Under \$7.00.....	....	....
7- 8.....	....	....
8- 9.....	9	1
9-10.....	15	5
10-11.....	36	25
11-12.....	120	90
12-13.....	97	148
13-14.....	94	86
14-15.....	100	234
15-16.....	43	77
16-18.....	42	94
18-20.....	25	94
20-22.....	9	16
22-up.....	3	18
Total.....	593	888

The same trade in cities over 30,000, excepting Toronto:

	1923	1929
Number of firms reporting.....	4	7
Total number of female employees.....	73	647
Over 18 years.....	52	594
Under 18 years.....	21	53
Total weekly wages.....	\$1,015 09	\$10,155 09
Over 18 years.....	765 42	9,593 28
Under 18 years.....	250 67	561 81
Average weekly wages.....	13 91	15 69
Over 18 years.....	14 72	16 15
Under 18 years.....	11.93	10.60
Percentage of young girls under 18.....	28.7	8.2
Percentage of married women.....	9.6	4.4
Average hours per week.....	46.6	48.3
Weekly rate of wages:		
Under \$7.00.....	.....	.....
7- 8.....	.....	.....
8- 9.....	1	1
9-10.....	4	...
10-11.....	7	76
11-12.....	11	33
12-13.....	7	52
13-14.....	10	37
14-15.....	11	47
15-16.....	3	73
16-18.....	9	133
18-20.....	8	105
20-22.....	2	48
22-up.....	.....	42
Total.....	73	647

The same trade in cities and towns of from 5,000 to 30,000 population:

	1923	1929
Number of firms reporting.....	4	11
Total number of female employees.....	32	532
Over 18 years.....	21	432
Under 18 years.....	11	100
Total weekly wages.....	\$351.25	\$7,529.13
Over 18 years.....	242.75	6,392 98
Under 18 years.....	108 50	1,136 15
Average weekly wages.....	10.98	14.14
Over 18 years.....	11 56	14 34
Under 18 years.....	9 86	11 36
Percentage of young girls under 18.....	34.4	18.8
Percentage of married women.....	12.5	9.7
Average hours worked per week.....	48.5	49.
Weekly rate of wages:		
Under \$7.00.....	.....	.....
7- 8.....	.....	.....
8- 9.....	4	2
9-10.....	.....	60
10-11.....	17	45
11-12.....	4	92
12-13.....	2	82
13-14.....	1	63
14-15.....	3	51
15-16.....	.....	56
16-18.....	.....	47
18-20.....	.....	17
20-22.....	1	11
22- up.....	.....	6
Total.....	32	532

In places under 5,000 population:

	1923	1929
Number of firms reporting.....	1	3
Total number of female employees.....	3	21
Over 18 years.....	3	15
Under 18 years.....	...	6
Total weekly wages.....	\$34.00	\$246.98
Over 18 years.....	34.00	179.93
Under 18 years.....	...	67.05
Average weekly wages.....	11.33	11.76
Over 18 years.....	11.33	12.85
Under 18 years.....	...	11.18
Percentage of young girls under 18.....	...	28.5
Percentage of married women.....	...	33.3
Average hours worked per week.....	50	46.5

Weekly rate of wages:	1923	1929
Under \$7.00.....
7- 8.....
8- 9.....	...	2
9-10.....	...	3
10-11.....	2	1
11-12.....	...	3
12-13.....	1	8
13-14.....	...	1
14-15.....
15-16.....	...	3
16-18.....
18-20.....
20-22.....
22-up.....
Total.....	3	21

ORDER NO. 34

The food trades, including the making of confectionery, biscuit, chocolate, jam, gum, grocery specialties, crushed fruit, syrup, pickles, together with bakeries, packing houses and all allied industries (excepting seasonal canneries).

This order includes part of Order No. 2, which went into force August 1st, 1921. The latter part of this order came into force October 1st, 1924.

In the City of Toronto:

	1926	1929
Number of firms reporting.....	84	108
Total number of female employees.....	2,530	3,312
Over 18 years.....	2,132	2,719
Under 18 years.....	398	593
Total weekly wages.....	\$33,265 40	\$44,692 92
Over 18 years.....	28,394 85	38,378 21
Under 18 years.....	4,870 55	6,314 71
Average weekly wages.....	13 15	13 46
Over 18 years.....	13 46	14 12
Under 18 years.....	12 24	10 65
Percentage of young girls under 18.....	15.7	17.9
Percentage of married women.....	9.9	16.5
Average hours worked per week.....	46.1	45.3

Weekly rate of wages:.....	1926	1929
Under \$7 00.....	8	....
7- 8.....	....	....
8- 9.....	129	112
9-10.....	165	98
10-11.....	206	283
11-12.....	262	279
12-13.....	811	910
13-14.....	272	477
14-15.....	194	258
15-16.....	193	326
16-18.....	134	274
18-20.....	73	152
20-22.....	35	73
20-up.....	48	70
Total.....	2,530	3,312

The same trades in cities of 30,000 population or over, excepting Toronto:

Number of firms reporting.....	1926	1929
Total number of female employees.....	65	65
Over 18 years.....	925	935
Under 18 years.....	813	811
Total weekly wages.....	112	124
Over 18 years.....	\$11,530 57	\$12,930 11
Under 18 years.....	10,248 89	11,632 01
Average weekly wages.....	1,281 68	1,307 10
Over 18 years.....	12 47	13 82
Under 18 years.....	12 61	14 37
Percentage of young girls under 18.....	11 44	10 54
Percentage of married women.....	12.1	13.3
Average hours worked per week.....	16.4	20.3
	46.5	47.3

Weekly rate of wages:	1926	1929
Under \$7 00.....	11	1
7- 8.....	15	2
8- 9.....	73	33
9-10.....	66	44
10-11.....	120	56
11-12.....	160	170
12-13.....	143	200
13-14.....	90	95
14-15.....	68	87
15-16.....	85	94
16-18.....	48	56
18-20.....	23	41
20-22.....	15	30
22-up.....	8	26
Total.....	925	935

The same trades in places of 5,000 to 30,000 population:

Total number of firms reporting.....	1926	1929
Total number of female employees.....	76	73
Over 18 years.....	612	711
Under 18 years.....	503	571
Total weekly wages.....	109	140
Over 18 years.....	\$7,259 06	\$9,005 82
Under 18 years.....	6,076 98	7,581 51
Average weekly wages.....	1,182 08	1,424 31
Over 18 years.....	11 86	12 67
Under 18 years.....	12 08	13 28
Percentage of young girls under 18.....	10 84	10 17
Percentage of married women.....	17.8	19.7
Average hours worked per week.....	.88	11.5
	52.8	49.1

	1926	1929
Weekly rate of wages:		
Under \$7.00.....	44	14
7- 8.....	45	32
8- 9.....	89	35
9-10.....	27	133
10-11.....	150	103
11-12.....	79	137
12-13.....	38	68
13-14.....	23	35
14-15.....	32	47
15-16.....	31	29
16-18.....	22	22
18-20.....	20	26
20-22.....	12	30
22-up.....		
Total.....	612	711

The same trade in places under 5,000 population:

	1926	1929
Number of firms reporting.....	33	48
Total number of female employees.....	246	330
Over 18 years.....	220	299
Under 18 years.....	26	31
Total weekly wages.....	\$3,159 49	\$4,140 69
Over 18 years.....	2,842 57	3,806 12
Under 18 years.....	316 92	334 57
Average weekly wages.....	12 84	12 55
Over 18 years.....	12 92	13 40
Under 18 years.....	12 19	10 79
Percentage of young girls under 18.....	10.5	9.4
Percentage of married women.....	21.9	30.
Average hours worked per week.....	51.9	52.4

	1926	1929
Weekly rate of wages:		
Under \$7.00.....	2	2
7- 8.....	4	5
8- 9.....	15	2
9-10.....	5	29
10-11.....	32	52
11-12.....	53	40
12-13.....	30	42
13-14.....	6	17
14-15.....	63	26
15-16.....	9	74
16-18.....	7	22
18-20.....	8	11
20-22.....	3	2
22-up.....	9	6
Total.....	246	330

ORDER NO. 35

Miscellaneous order: governing all factory trades not dealt with in other orders (except seasonal canneries).

This order came into force October 1st, 1924.

In the City of Toronto:

	1926	1929
Number of firms reporting.....	95	132
Total number of female employees.....	1,189	1,654
Over 18 years.....	1,020	1,447
Under 18 years.....	169	207
Total weekly wages.....	\$16,765 57	\$23,530 23
Over 18 years.....	15,044 74	21,342 90
Under 18 years.....	1,720 83	2,187 33
Average weekly wages.....	14 10	14 22
Over 18 years.....	14 75	14 75
Under 18 years.....	10 18	10 57
Percentage of young girls under 18.....	14.2	12.5
Percentage of married women.....	15.6	17.4
Average hours worked per week.....	45.7	45.2

Weekly rate of wages:	1926	1929
Under \$7.00.....	....	....
7- 8.....	2	2
8- 9.....	23	40
9-10.....	50	46
10-11.....	100	121
11-12.....	111	105
12-13.....	253	390
13-14.....	178	206
14-15.....	92	170
15-16.....	84	183
16-18.....	130	161
18-20.....	78	109
20-22.....	43	63
22-up.....	45	58
Total.....	1,189	1,654

In cities of 30,000 population or over, excepting Toronto:

	1926	1929
Number of firms reporting.....	54	63
Total number of female employees.....	779	1,104
Over 18 years.....	701	988
Under 18 years.....	78	116
Total weekly wages.....	\$10,903 86	\$16,260 40
Over 18 years.....	10,008 85	14,950 22
Under 18 years.....	895 01	1,310 18
Average weekly wages.....	14 00	14 72
Over 18 years.....	14 28	15 13
Under 18 years.....	11 47	11 29
Percentage of young girls under 18.....	10.	10.5
Percentage of married women.....	16.8	16.1
Average hours worked per week.....	47.3	48.2

Weekly rate of wages:	1926	1929
Under \$7 00.....	....	1
7- 8.....	2	2
8- 9.....	21	9
9-10.....	43	43
10-11.....	59	58
11-12.....	103	160
12-13.....	129	138
13-14.....	83	146
14-15.....	54	93
15-16.....	72	94
16-18.....	127	114
18-20.....	35	165
20-22.....	14	44
22-up.....	37	37
Total.....	779	1,104

In cities and towns of from 5,000 to 30,000 population:

	1926	1929
Number of firms reporting.....	72	89
Total number of female employees.....	1,123	1,276
Over 18 years.....	924	1,058
Under 18 years.....	199	218
Total weekly wages.....	\$14,511 87	\$17,197 39
Over 18 years.....	12,307 86	14,816 39
Under 18 years.....	2,204 01	2,381 00
Average weekly wages.....	12 92	13 48
Over 18 years.....	13 32	14 00
Under 18 years.....	11 08	10 92
Percentage of young girls under 18.....	17.7	17.08
Percentage of married women.....	15.5	19.2
Average hours worked per week.....	48.7	49.7

Weekly rate of wages:	1926	1929
Under \$7 00.....	9	6
7- 8.....	19	27
8- 9.....	24	40
9-10.....	97	79
10-11.....	98	72
11-12.....	261	277
12-13.....	147	155
13-14.....	99	131
14-15.....	147	106
15-16.....	79	108
16-18.....	71	132
18-20.....	28	55
20-22.....	12	22
22-up.....	32	66
Total.....	1,123	1,276

The same trades in places having less than 5,000 population.

	1926	1929
Number of firms reporting.....	56	71
Total number of female employees.....	972	1,248
Over 18 years.....	830	1,072
Under 18 years.....	142	176
Total weekly wages.....	\$12,002 50	\$15,157 56
Over 18 years.....	10,587 50	13,345 59
Under 18 years.....	1,415 00	1,811 97
Average weekly wages.....	12 35	12 15
Over 18 years.....	12 76	12 45
Under 18 years.....	9.96	10.29
Percentage of young girls under 18.....	14.6	14.1
Percentage of married women under 50.....	17.3	25.2
Average hours worked per week.....	48.7	49.7

Weekly rate of wages:	1926	1929
Under \$7 00.....	16	22
7- 8.....	22	12
8- 9.....	139	94
9-10.....	59	201
10-11.....	166	191
11-12.....	92	189
12-13.....	97	122
13-14.....	63	64
14-15.....	26	43
15-16.....	34	217
16-18.....	225	45
18-20.....	20	23
20-22.....	7	10
22-up.....	6	15
Total.....	972	1,248

ORDER NO. 36

Factories making tobacco goods,

In the City of Toronto:

	1926	1929
Number of firms reporting.....	5	4
Total number of female employees.....	219	214
Over 18 years.....	213	209
Under 18 years.....	6	5
Total weekly wages.....	\$3,217 96	\$3,295 09
Over 18 years.....	3,152 08	3,249 09
Under 18 years.....	65 88	46 00
Average weekly wages.....	14 69	15 40
Over 18 years.....	14 80	15 55
Under 18 years.....	10 98	9 20
Percentage of young girls under 18.....	2.7	2.3
Percentage of married women.....	12.8	36.9
Average hours worked per week.....	42.	44.

Weekly rate of wages:	1926	1929
Under \$7 00.....	.....	.....
7- 8.....	.....	.....
8- 9.....	2	3
9-10.....	13	.....
10-11.....	20	54
11-12.....	29	3
12-13.....	17	26
13-14.....	17	8
14-15.....	8	7
15-16.....	10	3
16-18.....	18	3
18-20.....	28	90
20-22.....	41	4
22-up.....	16	13
Total.....	219	214

The same trades in cities of 30,000 population or over, excepting Toronto:

	1926	1929
Number of firms reporting.....	5	7
Total number of female employees.....	308	292
Over 18 years.....	285	268
Under 18 years.....	23	24
Total weekly wages.....	\$3,706 82	\$3,436 90
Over 18 years.....	3,480 82	3,197 90
Under 18 years.....	226 00	239 00
Average weekly wages.....	12 04	11 77
Over 18 years.....	12 21	11 93
Under 18 years.....	9 83	9 96
Percentage of young girls under 18.....	7.5	8.2
Percentage of married women.....	26.6	44.1
Average hours worked per week.....	42.6	43.7

Weekly rate of wages:	1926	1929
Under \$7 00.....	.....	.....
7- 8.....	.....	2
8- 9.....	8	1
9-10.....	42	46
10-11.....	54	49
11-12.....	81	104
12-13.....	46	29
13-14.....	20	20
14-15.....	18	9
15-16.....	21	9
16-18.....	7	20
18-20.....	5	2
20-22.....	3	..
22-up.....	3	1
Total.....	308	292

In cities and towns of from 5,000 to 30,000 population:

	1926	1929
Number of firms reporting.....	1	1
Total number of female employees.....	9	8
Over 18 years.....	9	7
Under 18 years.....	.....	1
Total weekly wages.....	\$95 92	104 38
Over 18 years.....	95 92	96 38
Under 18 years.....	.....	8.00
Average weekly wages.....	10.66	13.05
Over 18 years.....	10.66	13.77
Under 18 years.....	.....	8.00
Percentage of young girls under 18.....	.....	12.5
Percentage of married women.....	.....	25.
Average hours worked per week.....	38.3	44.

Weekly rate of wages:	1926	1929
Under \$7 00.....	....	....
7- 8.....	2	....
8- 9.....	....	1
9-10.....	2	....
10-11.....	1	3
11-12.....	1	2
12-13.....	....	....
13-14.....	2	....
14-15.....	1	....
15-16.....	....	....
16-18.....	....	....
18-20.....	....	1
20-22.....	....	....
22-up.....	....	1
Total.....	9	8

In places having less than 5,000 urban population:

	1926	1929
Number of firms reporting.....	2	2
Total number of female employees.....	39	150
Over 18 years.....	33	138
Under 18 years.....	6	12
Total weekly wages.....	\$458 69	\$1,725 23
Over 18 years.....	396 59	1,595 21
Under 18 years.....	62 10	130 02
Average weekly wages.....	11 76	11 50
Over 18 years.....	12 02	11 56
Under 18 years.....	10 35	10 84
Percentage of young girls under 18.....	15.4	8.
Percentage of married women.....	48.7	61.3
Average hours worked per week.....	43.	52.5
Weekly rate of wages:	1926	1929
Under \$7 00.....	....	2
7- 8.....	....	....
8- 9.....	....	....
9-10.....	1	2
10-11.....	24	52
11-12.....	5	57
12-13.....	1	1
13-14.....	1	32
14-15.....	3	1
15-16.....	1	1
16-18.....	2	2
18-20.....	....	....
20-22.....	....	....
22-up.....	1	....
Total.....	39	150

ORDER NO. 37

Factories making rubber goods,

In the City of Toronto:

	1926	1929
Number of firms reporting.....	6	5
Total number of female employees.....	434	572
Over 18 years.....	415	525
Under 18 years.....	19	47
Total weekly wages.....	\$7,152 43	\$9,745 45
Over 18 years.....	6,892 97	9,071 81
Under 18 years.....	259 46	673 64
Average weekly wages.....	16 48	17 04
Over 18 years.....	16 61	17 28
Under 18 years.....	13 66	14 33
Percentage of young girls under 18.....	4.4	8.2
Percentage of married women.....	24.8	30.9
Average hours worked per week.....	45.8	45.7

Weekly rate of wages:	1926	1929
Under \$7 00.....	.....	.....
7- 8.....	.....	1
8- 9.....	.....	.....
9-10.....	.....	2
10-11.....	2	2
11-12.....	5	37
12-13.....	40	21
13-14.....	53	47
14-15.....	56	29
15-16.....	55	57
16-18.....	99	148
18-20.....	70	153
20-22.....	30	40
22-up.....	24	35
Total.....	434	572

The same trades in cities of 30,000 population or over, excepting Toronto:

	1926	1929
Number of firms reporting.....	2	1
Total number of female employees.....	3	51
Over 18 years.....	3	51
Under 18 years.....	.....	.....
Total weekly wages.....	\$65 38	\$912 63
Over 18 years.....	65 38	912 63
Under 18 years.....	.....	.....
Average weekly wages.....	21 79	17 89
Over 18 years.....	21 79	17 89
Under 18 years.....	.....	.....
Percentage of young girls under 18.....	.....	.....
Percentage of married women.....	.....	21.5
Average hours worked per week.....	40.6	50.

Weekly rate of wages:	1926	1929
Under \$7 00.....	.....	.....
7- 8.....	.....	.....
8- 9.....	.....	.....
9-10.....	.....	.....
10-11.....	.....	.....
11-12.....	.....	.....
12-13.....	.....	.....
13-14.....	.....	2
14-15.....	.....	1
15-16.....	.....	4
16-18.....	.....	26
18-20.....	1	9
20-22.....	1	7
22-up.....	1	2
Total.....	3	51

The same trades in cities and towns of 5,000 to 30,000 population:

	1926	1929
Number of firms reporting.....	8	11
Total number of female employees.....	517	919
Over 18 years.....	402	750
Under 18 years.....	115	169
Total weekly wages.....	\$6,419 12	\$12,863 09
Over 18 years.....	5,324 78	11,062 46
Under 18 years.....	1,094 34	1 800 63
Average weekly wages.....	12 42	14 00
Over 18 years.....	13 25	14 75
Under 18 years.....	9 52	10 65
Percentage of young girls under 18.....	22.2	18.3
Percentage of married women.....	17.6	30.7
Average hours worked per week.....	48 9	51.8

Weekly rate of wages:	1926	1929
Under \$7 00.....	4	2
7- 8.....	7	26
8- 9.....	41	88
9-10.....	44	49
10-11.....	55	86
11-12.....	111	119
12-13.....	65	110
13-14.....	54	97
14-15.....	43	90
15-16.....	35	70
16-18.....	33	88
18-20.....	15	53
20-22.....	7	25
22-up.....	3	16
Total.....	517	919

The same trades in places having less than 5,000 urban population:

	1926	1929
Number of firms reporting.....	3	5
Total number of female employees.....	255	326
Over 18 years.....	200	294
Under 18 years.....	55	32
Total weekly wages.....	\$3,714 98	\$4,967 87
Over 18 years.....	3,005 92	4,572 62
Under 18 years.....	709 06	395 25
Average weekly wages.....	14 56	15 24
Over 18 years.....	15 03	15 55
Under 18 years.....	12 89	12 35
Percentage of young girls under 18.....	21.6	9.8
Percentage of married women.....	11.8	13.1
Average hours worked per week.....	54.1	51.9
Weekly rate of wages:	1926	1929
Under \$7 00.....	....	2
7- 8.....	4	2
8- 9.....	8	7
9-10.....	13	16
10-11.....	20	16
11-12.....	22	17
12-13.....	29	25
13-14.....	20	18
14-15.....	28	35
15-16.....	26	35
16-18.....	34	92
18-20.....	26	35
20-22.....	21	22
22-up.....	4	4
Total.....	255	326

ORDER NO. 38

Factories making jewellery,

In the City of Toronto:

	1926	1929
Number of firms reporting.....	20	22
Total number of female employees.....	159	236
Over 18 years.....	141	208
Under 18 years.....	18	28
Total weekly wages.....	\$2,274 93	\$3,436 73
Over 18 years.....	2,108 93	3,148 78
Under 18 years.....	166 00	287 95
Average weekly wages.....	14 31	14 56
Over 18 years.....	14 96	15 14
Under 18 years.....	9 22	10 28
Percentage of young girls under 18.....	11.3	11.9
Percentage of married women.....	8.8	12.7
Average hours worked per week.....	44.	47.5

Weekly rate of wages:	1926	1929
Under \$7 00.....	2	....
7- 8.....	1	1
8- 9.....	8	11
9-10.....	7	8
10-11.....	11	15
11-12.....	12	13
12-13.....	23	43
13-14.....	17	22
14-15.....	16	23
15-16.....	13	21
16-18.....	13	31
18-20.....	12	16
20-22.....	13	13
22-up.....	11	19
Total.....	159	236

In cities of 30,000 population or over, excepting Toronto:

	1926	1929
Number of firms reporting.....	6	7
Total number of female employees.....	17	29
Over 18 years.....	14	5
Under 18 years.....	3	24
Total weekly wages.....	\$223 59	\$386 00
Over 18 years.....	201 59	344 00
Under 18 years.....	22 00	42 00
Average weekly wages.....	13 15	13 31
Over 18 years.....	14 40	14 33
Under 18 years.....	7 33	8 40
Percentage of young girls.....	17.6	17.2
Percentage of married women.....	....	3.4
Average hours worked per week.....	46.1	44.

Weekly rate of wages:	1926	1929
Under \$7 00.....	....	....
7- 8.....	2	4
8- 9.....	1	1
9-10.....	....	....
10-11.....	....	3
11-12.....	4	4
12-13.....	....	3
13-14.....	....	....
14-15.....	4	2
15-16.....	1	1
16-18.....	5	6
18-20.....	....	3
20-22.....	....	2
22 up.....	....	....
Total.....	17	29

The same trades in towns and cities of 5,000 to 30,000 population:

	1926	1929
Number of firms reporting.....	5	7
Total number of female employees.....	61	147
Over 18 years.....	51	124
Under 18 years.....	10	23
Total weekly wages.....	\$803 97	\$2,038 38
Over 18 years.....	691 84	1,827 51
Under 18 years.....	112 13	210 87
Average weekly wages.....	13 18	13 89
Over 18 years.....	13 56	14 74
Under 18 years.....	11 21	9 17
Percentage of young girls under 18.....	16.4	15.6
Percentage of married women.....	13.1	13.5
Average hours worked per week.....	47.1	47.4

Weekly rate of wages:	1926	1929
Under \$7 00.....	....	....
7- 8.....	....	2
8- 9.....	4	15
9-10.....	....	5
10-11.....	13	19
11-12.....	7	19
12-13.....	8	13
13-14.....	5	10
14-15.....	11	16
15-16.....	5	13
16-18.....	3	21
18-20.....	2	3
20-22.....	3	1
22-up.....	....	10
Total.....	61	147

ORDER NO. 39

The paper trades, which include printing, bookbinding, paper box making, paper bag making, manufacturing stationery and other trades making paper or paper products.

This order includes part of Order No. 2, which went into force August 1st, 1921. The latter part came into force November 15th, 1924.

In the City of Toronto:

	1926	1929
Number of firms reporting.....	162	197
Total number of female employees.....	2,514	2,846
Over 18 years.....	2,197	2,502
Under 18 years.....	317	344
Total weekly wages.....	\$36,457 96	\$44,456 39
Over 18 years.....	33,152 65	40,595 50
Under 18 years.....	3,305 31	3,860 89
Average weekly wages.....	14 50	15 61
Over 18 years.....	15 08	16 22
Under 18 years.....	10 42	11 23
Percentage of young girls under 18.....	12.6	12.
Percentage of married women.....	13.6	14.2
Average hours worked per week.....	45.7	46.

Weekly rate of wages:	1926	1929
Under \$7 00.....	4	...
7- 8.....	6	8
8- 9.....	107	79
9-10.....	151	132
10-11.....	201	143
11-12.....	155	116
12-13.....	401	483
13-14.....	195	226
14-15.....	197	260
15-16.....	240	249
16-18.....	492	614
18-20.....	170	216
20-22.....	80	144
22-up.....	115	176
Total.....	2,514	2,846

The same trades in cities of 30,000 population or over, excepting Toronto:

	1926	1929
Number of firms reporting.....	64	69
Total number of female employees.....	642	1,349
Over 18 years.....	583	1,211
Under 18 years.....	60	138
Total weekly wages.....	\$8,521 29	\$18,389 69
Over 18 years.....	7,939 28	17,061 76
Under 18 years.....	582 01	1,327 93
Average weekly wages.....	13 25	13 63
Over 18 years.....	13 62	14 09
Under 18 years.....	9 70	9 62
Percentage of young girls under 18.....	9.3	10.2
Percentage of married women.....	10.6	7.4
Average hours worked per week.....	46.5	46.2
 Weekly rate of wages:	 1926	 1929
Under \$7 00.....	1	....
7- 8.....	4	....
8- 9.....	50	32
9-10.....	51	103
10-11.....	73	77
11-12.....	87	311
12-13.....	84	196
13-14.....	81	147
14-15.....	42	137
15-16.....	49	98
16-18.....	37	102
18-20.....	24	53
20-22.....	19	28
22-up.....	41	65
Total.....	643	1,349

The same trades in towns and cities of from 5,000 to 30,000 population:

	1926	1929
Number of firms reporting.....	59	72
Total number of female employees.....	579	820
Over 18 years.....	509	695
Under 18 years.....	70	125
Total weekly wages.....	\$7,452 31	\$10,937 06
Over 18 years.....	6,794 95	9,702 20
Under 18 years.....	657 36	1,234 86
Average weekly wages.....	12 87	13 34
Over 18 years.....	13 35	13 96
Under 18 years.....	9 39	9 89
Percentage of young girls under 18.....	12.1	15.2
Percentage of married women.....	8.3	10.5
Average hours worked per week.....	47.5	47.5
 Weekly rate of wages:	 1926	 1929
Under \$7 00.....	2	....
7- 8.....	26	13
8- 9.....	28	28
9-10.....	55	48
10-11.....	87	93
11-12.....	112	148
12-13.....	58	135
13-14.....	20	54
14-15.....	35	55
15-16.....	65	63
16-18.....	28	65
18-20.....	19	31
20-22.....	11	31
22-up.....	33	56
Total.....	579	820

The same trades in places having less than 5,000 urban population:

	1926	1929
Number of firms reporting.....	95	78
Total number of female employees.....	250	398
Over 18 years.....	231	348
Under 18 years.....	19	50
Total weekly wages.....	\$3,266 71	\$5,252 38
Over 18 years.....	3,074 22	4,827 50
Under 18 years.....	192 49	624 50
Average weekly wages.....	13 06	13 20
Over 18 years.....	13 31	13 87
Under 18 years.....	10 13	12 49
Percentage of young girls under 18.....	7.6	12.8
Percentage of married women.....	6.2	7.7
Average hours worked per week.....	47.3	47.5
Weekly rate of wages:	1926	1929
Under \$7 00.....	13	4
7- 8.....	7	4
8- 9.....	5	19
9-10.....	5	8
10-11.....	33	57
11-12.....	7	48
12-13.....	34	67
13-14.....	35	44
14-15.....	37	22
15-16.....	39	60
16-18.....	12	31
18-20.....	8	10
20-22.....	10	15
22-up.....	5	9
Total.....	250	398

ORDER NO. 27

Hotels, restaurants and refreshment rooms,

In the City of Toronto:

	1926	1929
Number of firms reporting.....	138	166
Total number of female employees.....	1,949	2,821
Over 18 years.....	1,925	2,780
Under 18 years.....	24	41
Total weekly wages.....	\$30,333 86	\$46,166 46
Over 18 years.....	29,985 11	45,520 80
Under 18 years.....	348 75	645 66
Average weekly wages.....	15 56	16 36
Over 18 years.....	15 58	16 37
Under 18 years.....	14 53	15 75
Percentage of young girls under 18.....	1.2	1.4
Percentage of married women.....	35.6	34.4
Average hours worked per week.....	49.8	50.6
Weekly rate of wages:	1926	1929
Under \$7 00.....	.....	.....
7- 8.....	.....	.....
8- 9.....	.....	.....
9-10.....	.....	.....
10-11.....	.....	.....
11-12.....	.....	.....
12-13.....	168	85
13-14.....	375	459
14-15.....	254	427
15-16.....	423	456
16-18.....	386	667
18-20.....	157	472
20-22.....	98	116
22-up.....	88	139
Total.....	1,949	2,821

ORDER No. 46

Hotels, restaurants and refreshment rooms,

In towns and cities of 30,000 population or over, excepting Toronto:

	1927	1929
Number of firms reporting.....	87	132
Total number of female employees.....	392	867
Over 18 years.....	365	848
Under 18 years.....	27	19
Total weekly wages.....	\$6,290 44	\$12,639 30
Over 18 years.....	5,940 94	12,391 55
Under 18 years.....	349 50	247 75
Average weekly wages.....	16 05	14 58
Over 18 years.....	16 28	14 61
Under 18 years.....	12 94	13 04
Percentage of young girls under 18.....	6.8	2.19
Percentage of married women.....	29.5	26.7
Average hours worked per week.....	57.7	51.9
 Weekly rate of wages:	 1927	 1929
Under \$7 00.....		
7- 8.....		
8- 9.....		
9-10.....		
10-11.....		
11-12.....		
12-13.....	94	209
13-14.....	66	203
14-15.....	59	144
15-16.....	28	116
16-18.....	84	108
18-20.....	42	57
20-22.....	10	15
22-up.....	9	15
Total.....	392	867

In cities and towns of from 10,000 to 30,000 population:

Number of firms reporting.....	1929
176	176
Total number of female employees.....	1,071
Over 18 years.....	1,020
Under 18 years.....	51
Total weekly wages.....	\$14,922 13
Over 18 years.....	14,250 23
Under 18 years.....	671 90
Average weekly wages.....	13 93
Over 18 years.....	13 97
Under 18 years.....	13 17
Percentage of young girls under 18.....	4.7
Percentage of married women.....	28.
Average hours worked per week.....	52.4
 Weekly rate of wages:	 1929
Under \$7 00.....	
7- 8.....	
8- 9.....	
9-10.....	
10-11.....	
11-12.....	163
12-13.....	249
13-14.....	205
14-15.....	191
15-16.....	73
16-18.....	104
18-20.....	39
20-22.....	19
22-up.....	28
Total.....	1,071

In cities and towns of from 4,000 to 10,000 populaton:

	1929
Number of firms reporting	117
Total number of female employees	484
Over 18 years	455
Under 18 years	29
Total weekly wages	\$6,566 91
Over 18 years	6,208 87
Under 18 years	358 04
Average weekly wages	13 57
Over 18 years	13 65
Under 18 years	12 35
Percentage of young girls under 18	5.9
Percentage of married women	20.2
Average hours worked per week	53.1
Weekly rate of wages:	1929
Under \$7 00 .....	....
7- 8 .....	....
8- 9 .....	....
9-10 .....	....
10-11	29
11-12	79
12-13	118
13-14	131
14-15	51
15-16	15
16-18	25
18-20	16
20-22	9
22-up	11
Total	484

ORDER No. 41

Custom Millinery in Toronto:

	1928	1929
Number of firms reporting	68	59
Total number of female employees	625	513
Over 18 years	562	471
Under 18 years	63	42
Total weekly wages	\$10,562 51	\$8,351 10
Over 18 years	10,026 51	7,984 60
Under 18 years	536 00	366 50
Average weekly wages	16 90	16 28
Over 18 years	17 84	16 96
Under 18 years	8 50	8 72
Percentage of young girls under 18	10.	8.1
Percentage of married women	13.6	10.7
Average hours worked per week	46.8	46.3
Weekly rate of wages:	1928	1929
Under \$7 00	21	19
7- 8	20	9
8- 9	20	13
9-10	17	19
10-11	30	22
11-12	10	3
12-13	56	39
13-14	32	19
14-15	45	34
15-16	66	63
16-18	80	89
18-20	52	53
20-22	45	22
22-up	131	109
Total	625	513

ORDER No. 43

Custom Millinery in cities of 30,000 population or over, excepting Toronto

	1928	1929
Number of firms reporting.....	48	38
Total number of female employees.....	212	169
Over 18 years.....	203	166
Under 18 years.....	9	3
Total weekly wages.....	\$3,162 79	\$2,827 00
Over 18 years.....	3,086 79	2,806 00
Under 18 years.....	76 00	21 00
Average weekly wages.....	14 92	16 72
Over 18 years.....	15 20	17 37
Under 18 years.....	8 44	7 00
Percentage of young girls under 18 years.....	4.2	1.7
Percentage of married women.....	14.7	18.8
Average hours worked per week.....	48.	47.6
 Weekly rate of wages:	 1928	 1929
Under \$7 00.....	7	3
7- 8.....	1	.....
8- 9.....	4	2
9-10.....	5	.....
10-11.....	12	2
11-12.....	5	3
12-13.....	46	36
13-14.....	18	21
14-15.....	6	6
15-16.....	22	22
16-18.....	22	16
18-20.....	15	15
20-22.....	17	14
22-up.....	32	29
Total.....	212	169

ORDER No. 45

Custom Millinery in places of from 5,000 to 30,000 population:

Number of firms reporting.....	1929
74	74
Total number of female employees.....	156
Over 18 years.....	145
Under 18 years.....	11
Total weekly wages.....	\$2,351 75
Over 18 years.....	2,285 75
Under 18 years.....	66 00
Average weekly wages.....	15 07
Over 18 years.....	15 76
Under 18 years.....	6 00
Percentage of young girls under 18 years.....	7.
Percentage of married women.....	7.7
Average hours worked per week.....	50.6
 Under \$7 00.....	 1929
7- 8.....	11
8- 9.....	4
9-10.....	3
10-11.....	5
11-12.....	12
12-13.....	3
13-14.....	19
14-15.....	6
15-16.....	6
16-18.....	26
18-20.....	14
20-22.....	12
22-up.....	14
21	21
Total.....	156

ORDER NO. 42

Hairdressing and Beauty Parlors in Toronto:

	1928	1929
Number of firms reporting.....	64	65
Total number of female employees.....	271	287
Over 18 years.....	258	272
Under 18 years.....	13	15
Total weekly wages.....	\$5,139 00	\$5,642 02
Over 18 years.....	4,967 25	5,449 89
Under 18 years.....	171 75	192 13
Average weekly wages.....	18 96	19 65
Over 18 years.....	19 25	20 03
Under 18 years.....	13 21	12 81
Percentage of young girls under 18.....	4.8	5.2
Percentage of married women.....	15.5	12.2
Average hours worked per week.....	47.3	47.5
Weekly rate of wages:	1928	1929
Under \$7 00.....	8	4
7- 8.....	3	2
8- 9.....	3	2
9-10.....	2	2
10-11.....	6	7
11-12.....	2	1
12-13.....	18	16
13-14.....	3	6
14-15.....	2	11
15-16.....	37	36
16-18.....	25	28
18-20.....	46	47
20-22.....	42	36
22-up.....	74	89
Total.....	271	287

ORDER NO. 44

The same trades in cities of 30,000 population or over, excepting Toronto:

	1929
Number of firms reporting.....	44
Total number of female employees.....	111
Over 18 years.....	.....
Under 18 years.....	.....
Total weekly wages.....	\$1,896 24
Over 18 years.....	.....
Under 18 years.....	.....
Average weekly wages.....	17 08
Over 18 years.....	.....
Under 18 years.....	.....
Percentage of young girls under 18.....	.....
Percentage of married women.....	13.5
Average hours worked per week.....	46.7
Weekly rate of wages:	1929
Under \$7 00.....	1
7- 8.....	.....
8- 9.....	1
9-10.....	.....
10-11.....	4
11-12.....	.....
12-13.....	12
13-14.....	1
14-15.....	4
15-16.....	21
16-18.....	14
18-20.....	13
20-22.....	17
22 up.....	23
Total.....	111

ADMINISTRATION

The Board is charged with the enforcement of its orders, and endeavours to make them effective in every trade and in every region of the province. As Toronto is the largest community and the chief industrial centre of Ontario, as well as the headquarters of government, our work is most active there. Other centres visited by some member of the Board were Hamilton, Ottawa, London, Peterborough, Kingston, Brantford, Guelph, Uxbridge and Meaford. However, the greater part of the administrative work is done by other means than a personal visit.

The orders are printed on cards and kept posted in all the factories, stores, shops, laundries, hotels and theatres. The factory inspectors, who constantly visit these places, report as to their being properly displayed. New copies are supplied where lacking, while a succession of adverse reports as to any firm leads to a special enquiry.

The Board has worked out and uses to great advantage a system of collection and analysis of the wage sheets of the firms employing women. During the year 3,850 wage sheets were thus gathered including 73,663 workers, 410 of which showed some apparent lack of conformity with the orders. Each of these was taken up with the firm concerned and either satisfactorily explained or satisfactorily adjusted. An incidental but extremely valuable consequence is the assembling of a mass of statistical data, respecting the employment of women in Ontario.

In addition many complaints reach us. They come in different ways, by letter, over the 'phone, or by personal calls at our office. They are furnished by all sorts of people, employees, employers, the clergy, welfare organizations, officials, and interested individual citizens. In dealing with these the Board meets fortnightly with Mr. J. T. Burke, Chief Factory Inspector, and finds his assistance invaluable. During the year twenty-four such meetings were held and 379 complaints considered. They were all peaceably and satisfactorily settled. These complaints come steadily throughout this year, with some increase in the winter months.

One of the members of the Board, Mr. H. G. Fester, gives his time to the adjustment of such cases as require personal attention. It is very largely because of his efforts that even the sharpest difficulties have been resolved without recourse to the courts.

The volume of our correspondence is shown in the following summary:

Dictated letters.....	3,188
Orders sent out.....	1,143
Question forms sent out.....	5,443
Form letters sent out.....	7,433
Letters received.....	1,358

COLLECTION OF ARREARS

The Board has collected arrears due a number of workers, as follows:

Firms concerned.....	52
Employees concerned.....	56
Amount collected.....	\$1,349 47
Largest amount to any worker.....	100 00
Smallest amount to any worker.....	1 78
Average amount.....	22 31

Other arrears have also been collected privately of which the particulars have not been reported.

It will be observed that much less arrears were collected in 1929 than in any of the three years immediately preceding. As, during this period, more workers have been brought under the orders while the number of complaints has not lessened, this may be taken as evidence of a completer conformity throughout the Province. The work of the Board is not so much to collect arrears as to see that there are no arrears to be collected.

PERMITS

The Board possesses authority to allow lower wages to handicapped employees, or to suspend or vary an order in case of emergency. The following table shows what has been done. It will be seen that the proportion of permits is so small that the general levels of wages are not affected, while the jobs are saved for a considerable number who otherwise would be shut out from gainful employment.

Number of firms to whom issued.....	87
Number of permits expired.....	28
Number now in force.....	127
(a) For handicapped workers.....	88
(b) Re proportion of experienced workers.....	27
(c) Special apprenticeships.....	8
(d) Others.....	4

OTHER MATTERS

During several years past the Board has maintained a booth at the Canadian National Exhibition, in conjunction with the Department of Labour. Literature has been distributed and many questions answered for a succession of inquirers, a number of whom are from the United States.

During the past year three new orders went into force. Female employees in wholesale establishments, warehouses and the like were included within the Office-workers Order. Regulations were adopted respecting female operators of elevators. Also, seasonal factories engaged in canning, packing and evaporating fruits and vegetables were brought under an order.

There are minimum wage laws in seven of the provinces of Canada. The Ontario Board is in touch with its sister boards by exchange of publications and correspondence. During the past year the Chairman met with the Boards of Quebec and Manitoba, severally. It is announced that Nova Scotia is to appoint its Board and enforce its law within the near future.

In conclusion the Board acknowledges with gratitude the constant and universal support it has been receiving. We owe a peculiar debt to organizations of labour and employers alike. They find in the fundamental principle that a working woman should live from her work, a doctrine upon which they can agree. They have been willing to co-operate with the Board in the enforcement of this principle. The Board is greatly encouraged by these friendships, believing that they are due both to the fairness of the methods it uses and the soundness of the work it has done.

J. W. Macmillan,
Chairman.
 Margaret Stephen.
 Lydia M. Parsons.
 H. G. Fester.
 R. A. Stapells,
Minimum Wage Board.

ROYAL COMMISSION
ON
AUTOMOBILE INSURANCE PREMIUM RATES

THE HON. MR. JUSTICE HODGINS
COMMISSIONER

INTERIM REPORT
ON
COMPULSORY INSURANCE AND
SAFETY RESPONSIBILITY
LAWS

PRINTED BY ORDER OF THE LEGISLATIVE
ASSEMBLY OF ONTARIO



ONTARIO

TORONTO
Printed and Published by
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1930

Extract from Votes and Proceedings of
the Legislative Assembly of the Province of
Ontario, Toronto, March 6th, 1930:

“The Provincial Secretary presented to
the House, by command of His Honor the
Lieutenant-Governor:—

Interim Report on Compulsory Insur-
ance and Safety Responsibility Laws by
Royal Commission on Automobile Insurance
Premium Rates, March 3rd, 1930. (Sessional
Papers No. 15.)”

1st Edition, March 10th, 1930

2nd Edition, March 20th, 1930

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ROYAL COMMISSION
ON
AUTOMOBILE INSURANCE PREMIUM RATES

Commissioner - - - HON. MR. JUSTICE FRANK E. HODGINS
Counsel - - - R. LEIGHTON FOSTER
Consulting Actuaries - WOODWARD, FONDILLER AND RYAN
Secretary - - - ERNEST M. LEE
Reporter - - - WILLIAM C. COO

EXTRACT from commission issued to the Honourable Frank E. Hodgins, one of the Justices of the Appellate Division of the Supreme Court of Ontario, dated the eighth day of February, 1929:

“To enquire into, investigate and report to our Lieutenant Governor upon:—

- (a) The reasonableness of automobile insurance premium rates in the province as fixed by the Canadian Automobile Underwriters Association and as charged by any licensed company.
- (b) The methods, rules, regulations and practices of the Canadian Automobile Underwriters Association with regard to the making, promulgating, enforcing or controlling of rates, commissions, forms, clauses, contracts or the placing of insurance.
- (c) The existing laws of Ontario and their practical operation in relation to the supervision, regulation and control of insurance premium rates in the province.
- (d) Any matter which, in the opinion of the Commissioner, it is necessary to investigate in view of the above enquiries.

AND to make such recommendations in regard to the above as he may think advisable..”

REPORT

ON

COMPULSORY INSURANCE AND SAFETY RESPONSIBILITY LAWS

To His Honour,

WILLIAM D. ROSS, ESQUIRE,

Lieutenant-Governor of Ontario.

May It Please Your Honour:

I have the honour to report that I have been appointed a Royal Commissioner by Commission under the Great Seal of Ontario, bearing date the 8th day of February, 1929, to make certain enquiries, and among others to enquire into the existing laws of Ontario and their practical operation in relation to the supervision, regulation, and control of insurance premium rates in the Province, and into any other matters which, in my opinion, it is necessary to investigate, in view of the other enquiries directed by my said Commission.

Having entered upon the Enquiry thus directed, I have the honour to submit this as a first Interim Report dealing with Compulsory Insurance and Safety Responsibility Laws, and amendments to the present Highway Traffic Laws and the Insurance Laws of Ontario.

I. SAFETY RESPONSIBILITY AND COMPULSORY INSURANCE LAWS IN GENERAL:

In considering laws originally conceived with the object and desire of protecting from pecuniary loss those injured by motors on the highways and roads of any community, it will be found that they dealt only with one aspect of careless driving, and that is its probable personal and financial results.

I have, therefore, thought it my duty to enquire whether some standard exists by which the usefulness of such laws may be judged, and whether there is not a larger problem raised by their consideration, which ought to be kept in mind, and provided for in their enactment. By this I mean the question of public safety, to which protection against financial loss should be subsidiary.

The principle which should underlie any law which treats of motor vehicle traffic on highways, and its consequences, social and financial, is that such legislation should be tested by considering first whether it has in it provision for the safeguarding of life, limb, and property.

To this end should be subordinated all provisions dealing with speed, road regulation, licenses, damages, offences etc., all of which have their proper place.

If viewed from this standpoint, the mind is focussed upon the fact that the use of swift moving and easily controlled vehicles on the highway may be made dangerous objects by dangerous drivers, or often by competent drivers who fail to do the right thing in an emergency, the consequence to others being just as deadly in the one case as in the other. The regulations dealing with the use of a motor, and its consequences, should not be considered as sufficient or reasonable, unless at the same time they contribute, in their working out, to the protection of the public from injury and damage, and, as well, afford and secure compensation for those injured by their breach.

It is in this spirit, and in the belief that Safety or Financial-Responsibility laws can, if carefully prepared and linked up with legislation or regulations dealing with speed road regulation, licensing of drivers, etc., make an effective contribution to the public safety that I submit my report.

II. GENERAL CONSIDERATIONS AND STATISTICS:

The rapid increase in the number of private passenger cars, due largely to the facilities afforded by finance companies for purchases on the instalment plan, brought about a strong demand for better surfaced roads. The Government of Ontario have responded to this demand, and are pursuing a comprehensive plan for smoothing out and bettering not only the King's Highway, but the smaller country roads.

The increase in automobiles is not confined to private passenger cars, but extends in two directions: the transport of passengers by buses for long distances, and the trucking of merchandise between the various cities, towns, and villages in Ontario. This development has brought upon highways designed really for smaller types of automobiles, two species of large, cumbrous, and often clumsy, vehicles, some of them steel structures on wheels, with regard to which any mechanical fault is apt to be serious, owing to the momentum which makes them doubly dangerous.

The result has been many accidents, and even where the conditions I have mentioned have not directly contributed to an accident, it cannot be denied that the highways, as a rule, both in the city and country, are, especially in some localities, congested so that careful driving is vitally necessary.

This Province has also, especially in the summer and autumn months, a very large number of visitors in motor cars coming from the States of Michigan and New York, and other States, as well as travellers who come into Canada by way of the Province of Quebec, going westward.

Increasing facilities are being, or have been, provided, at Windsor, Walkerville, Bridgeburg, Niagara Falls, and Sarnia, so that we may expect increasing numbers.

During 1929 enormous numbers of motor vehicles crossed the border into Ontario, the figures being as follows:

Bridgeburg.....	1,109,238
Niagara Falls.....	995,368
Sarnia.....	86,953
Walkerville.....	305,592
Windsor.....	864,962
Other Points.....	143,387

The registration in Canada of motor vehicles in 1928, in a population of 9,658,000, was 1,070,530, of which

- 921,395 were passenger cars
- 129,578 were motor trucks
- 2,190 were buses
- 8,315 were taxicabs
- 7,897 were motor cycles, and
- 1,155 were miscellaneous.

The registrations in Canada of motor vehicles was greater by 131,147 than the total of 1927.

In Ontario alone the registrations in 1928 were 488,804, or nearly 50% of all Canada. In 1929 this figure had increased to 536,666, of which 473,227 were passenger cars, and 63,444 commercial cars, etc., vehicles and motor trucks.

In Toronto there were registered in 1928, 80,347 passenger cars, and 13,316 commercial cars, while the Police Department gives the numbers for 1929 as 90,000 private passenger cars, and 16,000 trucks and commercial vehicles.

The total fatal accidents are reported by years as follows:

1926 - 81
1927 - 87
1928 - 80

III. ACCIDENTS—THEIR CAUSES AND PENALTIES:

How many of the accidents which are daily occurring in our Province are due to careless driving of some sort, is a subject on which data already collected elsewhere gives a sure indication. For instance: In England the General Secretary of the Safety First Association, Col. Pickard, D.S.O., gave evidence before the Royal Commission on Transport, that the estimate made by his association (aided by the coroners) was that 83% of the accidents were due to failure of the human element, 6% to vehicular defects, 7% to road defects, and 4% to weather, (skids, etc.)

Compare this with the latest experience collected in California, which ranks next to New York in the number of its registered cars, and in its influx of cars foreign to that State, as shown by the report issued in 1929, made by a joint Legislative Committee of the California Senate and Assembly, in the thirteen southern counties from 1923 to 1927:

Number of deaths from:

1. Careless driving.....	1,054
2. Speeding or Recklessness.....	568
3. Incompetence.....	442
4. Intoxication.....	220

Total from failure of the human element in the driver	2,284
---	-------

Total Deaths: 4,024

This gives a percentage of 56% due to this cause, as against 5% for defective equipment.

The United States National Conference of Street and Highway Safety, covering 244 cities, or 44 States, report the following:

Careless or Reckless Automobile Driver.....	32.7%
Careless or Reckless Pedestrian.....	29.3%
Both Parties Jointly.....	18.7%
Other Highway Users, including wagons, trains, street cars, bicycles, motor cycles, etc.....	16.4%
Defective Automobile.....	2.7%
Physically Defective Driver.....	0.2%

100. %

In Ontario the number of motor accidents was as follows:

	Fatal	Non-Fatal
1923 -	236	2,348
1924 -	254	3,020
1925 -	298	3,912
1926 -	298	4,114
1927 -	422	3,976
1928 -	477	5,397
1929 -	576	5,699

In these totals accidents to foreign and domestic cars are included, but the relative proportions are not given.

These statistics are given by the Ontario Safety League. They differ slightly from those collected by the Dominion Bureau of Statistics, which gives the deaths in Ontario as follows:

1923 -	208
1924 -	205
1925 -	256
1926 -	242
1927 -	387
1928 -	395

The Chief Statistician of the Metropolitan Life Insurance Company, has recently said: "The automobile fatality problem is becoming more acute in Canada; The death rate has almost doubled in the last

two years." He gives in 1927 the death rate figures: In Canada it was 4.3 per 100,000; in 1928 it was 5.8, and in 1929 8.4. "The Province of Ontario is in the lead with the high rate of auto fatalities, and is closely followed by the Province of Quebec." These he gives as 18. per 100,000, in Ontario, and 16.6 in Quebec.

The discrepancies in some of the figures I have quoted emphasize the absence to-day of a compulsory and uniform system of accident reporting, concerning which I make some recommendations in this Report. Statistics based upon voluntary reports are frequently misleading.

The efforts of the Department of Highways, and of the Minister in charge, have been constantly directed to this subject. Mr. J. P. Bickell, the Registrar of Motor Vehicles in Ontario, in a recent address, speaking of the Department's activities in investigating accidents, said:

"These inquiries revealed the fact that the majority of accidents were not caused by:

1. The Incompetent or Inexperienced driver.
2. Excessive Speed.
3. Glaring Headlights.
4. Defective Brakes.

True, a percentage of accidents could be attributed to these causes, but the great majority were obviously caused by apparently competent drivers with vehicles in good mechanical condition.

Highway accidents were then, and still are, caused chiefly by the selfish, thoughtless, and careless drivers - drivers who are subject to momentary lapses of traffic consciousness."

For reasons I give later, I am of the opinion that accidents caused by the class described in the last paragraph of Mr. Bickell's speech, while caused without evil intent, or recklessness, are just as much to be deplored and their perpetrators penalized, as those who have not that excuse. It is only by insistence that the motive or intent is of no consequence, (save in the criminal aspect of negligence), and that those two, by want of ordinary foresight, prudence, or by want of thoughtfulness, injure others, are the cause of as much (and perhaps more) injury, damage, and serious personal suffering, and should not be exempted from the provisions of any safety law.

The suspension during 1928, by the Department of Highways, of 1883 Ontario drivers' licenses, of which 726 were for driving while intoxicated, and the rest for reckless driving, causing serious accidents, etc., needs no comment. The publication of the names of the persons involved is much to be commended.

IV. CONDITIONS SURROUNDING AUTOMOBILE TRAFFIC, AND ITS CONTROL:

The condition surrounding automobile traffic are not in any way peculiar to Ontario, but prevail in neighbouring States of the United States to a very great degree, and in many of them legislative action

has been taken in two directions: (1) To create a sense of responsibility in a driver, to conduce to his carefulness in handling his machine, and (2) Providing relief from pecuniary loss to those injured by the carelessness of others on the highway.

Looking at the matter broadly, it is impossible not to be struck with the change in public sentiment as to the use of the highways due to the introduction of motor traffic. Under old conditions a very swift moving vehicle on a highway would have been regarded as a danger, and its progress surrounded by whatever conditions were possible to safeguard those using the highway with equal right. One would have thought that the habit of caution, and the instinct of preservation, would have led public sentiment to regard the increase in the number, speed, and ease of management of motor cars, as creating a menace to public safety, and to insist upon adequate safeguards being secured; but there is no denying that the ownership of enormous numbers of motor cars, both on this continent and in Europe, has turned public sentiment completely around, and now speed and priority are claimed as of right for motors on highways. Cities have streets which are narrow and where motors are allowed to park on both sides, and where double lines of street cars run along the middle of the street. Safety islands are often regarded only as obstructions to the free circulation of traffic, regardless of the fact that pedestrians outnumber motorists by a very large majority.

Sentiment is, therefore, becoming perceptible that perhaps too much license has been given to motor cars; that they occupy too much space upon the highways, and so obstruct travel when parked and that their speed in a thickly populated area renders extremely skilful driving necessary if accidents are to be reduced to a minimum, and that those on foot should be protected in crossing streets and intersections. The overcrowding of front seats in motors is said to be a frequent cause of careless, or worse, driving. The greater mileage driven by the average motor owner to-day, and consequently the greater time spent at the wheel, accentuates these conditions. And having regard to the imperative need for reducing the enormous number of fatalities and injuries, I might almost borrow the words of a well-known Canadian professor writing on another, and even larger, subject: "The Individual and His Rights are giving place to the Community and Its Needs—indeed, the man who is ceaselessly gadding about talking of his rights, is rapidly being classed among dangerous public nuisances."

I have examined with a great deal of care, by personal visits to centres in the United States where laws known either as Safety Responsibility Laws, or, as in Massachusetts, the Compulsory Insurance Law, have been enacted and are being administered, and I have heard at first hand the opinions and criticisms of those most familiar with the subject as affecting the acceptability, the workability, and the psychological effect, in the direction of safety, of these laws in the various States of the Union.

I have been fortunate enough to have had the views of the several State Superintendents of Insurance, as well as of some who have now retired from such an office, who have had to administer these laws, so far as they affect insurance companies and motor casualty insur-

ance, both from the point of view of public safety, insurance rates, or of financial responsibility for injury due to motor accidents. I have also been able to examine those responsible for the administration of those laws affecting highway traffic, and their consequences. Some of these are eminent in their own sphere, and of large experience.

In addition to these I have taken a great deal of testimony in order to ascertain the views of those familiar with the subject, as to the effect of these laws from the point of view of increasing safety on the highway. I have not only made these personal inquiries, but have secured from these witnesses all the material and literature which has been issued while the subject of compulsory insurance or safety responsibility was a controversial subject, both while the legislation now in force was in the making, and afterwards, when passed into law, and these have been studied with great care, both by myself and by both Counsel associated in this Enquiry

A list of those who testified before me is appended to this Report, which is accompanied by the written pamphlets, arguments, reports, resolutions, and decisions, regarding this important subject.

In the above inquiries I have naturally been in contact with those whose position or occupations made them familiar in a professional or technical sense with what is meant by Financial Responsibility, or Compulsory Insurance, as applied to motor car traffic and accidents. And on my return to Toronto I held a two days' session, to which all those thought to be interested were invited to give their views. I append to this report the names of those who attended, and a synopsis indicating the attitude of those who wrote instead of attending personally. A great many people testified before me, and many more have written in favour of what they called and understood as "compulsory insurance". In their view, apparently, if I may judge from the evidence, and their communications, these opinions do not betray a correct comprehension of what Compulsory Insurance, as viewed by the only law enacted in one of the States of the Union, really means, or of the fact that all other laws which are called Financial Responsibility Laws do include a modified form of universal compulsory insurance.

In prosecuting my Enquiry, I put a question designed to ascertain the views of those familiar with the Financial Responsibility Laws and the Compulsory Insurance Law, as to what, in their judgment, would be the best law to adopt if it was desired to take a first step in the direction of providing compensation for personal injury and property damage on the highway, due to carelessness of motorists, and at the same time to make some progress towards eliminating the reckless, incompetent, and drunken driver.

Mr. Wesley E. Monk, formerly the Insurance Commissioner in Massachusetts, and presently General Counsel of the Massachusetts Mutual Life Insurance Company, who had made a thorough and complete study of the subject, was good enough to make the significant reply in answer to a question which I propounded to him, that he would adopt the experimental scheme (i. e., Safety Responsibility Law) rather than go to the whole distance, (i. e., the Massachusetts Law).

This opinion is particularly interesting, as Mr. Monk is firmly convinced that Compulsory Insurance, as they have it in Massachusetts, sanely and properly administered, without any outside interference, is the best possible law. His view was confirmed later on by Mr. G. Gleason, of Boston, one of the Counsel of the Employers' Liability Assurance Corporation, and a partner of Mr. Edward C. Stone, who is responsible for the law in force in New Hampshire, known as the Stone Plan. He said, in answer to my question:

"I do not think any Province, or State, or country, which is embarking on a new venture, such as automobile financial responsibility laws, should take, no matter how sound they think it is, what I call a drastic or long step.

"I think, as Mr. Stone has said, a State or Province would be much better by starting in cautiously and conservatively, and not make the mistake which, I believe, we have made in Massachusetts, by taking such a bold step, and having a law on our books with which almost nobody is completely satisfied.

"I rather think it would be better to take a conservative step, so that you could be sure it is probably going to be right, and from time to time add on to it gradually. I am sure it would be a grave mistake to attempt to approach the Massachusetts law. It would be better to start in conservatively and give you an opportunity to build on, as Mr. Stone has said."

V. COMPULSORY INSURANCE AS INVOLVED IN SAFETY RESPONSIBILITY LAWS:

The Massachusetts law, and those passed in other States, include either in whole, or to some degree, Compulsory Insurance.

I want to make it clear throughout my Report in dealing with Compulsory Insurance and Safety Responsibility Laws, that on this continent there is only one question to be considered when it is determined to deal with greater safety and compensation for injuries, and that is, whether the earlier plan Massachusetts adopted for requiring compulsory insurance or security from all motorists, and irrespective of their driving record, is better than the later ones (fifteen states including New York and Connecticut) which introduce the plan gradually, and in such a way as to deal fairly and reasonably both with those who are careful, and those who are not, and which are linked up with provisions dealing with care and consideration for others, as well as financial responsibility for injuries caused by breach of the traffic or criminal laws.

There is only one law which can be described as a compulsory insurance law for all motorists, and which has operated long enough for its working to be examined and tested in the light of experience, and that is the Massachusetts law: and as such I will refer to it as an example of legislation that compels every motorist — good, bad, or indifferent, with or without fault — to commence his career or continue it, accompanied by an insurance policy, guaranteeing that the third party whom he may injure shall be able to receive some compensation. All other such laws are too recent in date, or too far removed from our conditions, as to constitute useful guides to indicate what should be our legislation here.

Compulsory Insurance, as such, is not an issue, for both the Massachusetts law, the English, and the New Zealand law, and all the other laws which differ from it, called Safety or Financial Responsibility Laws, include some form of compulsory insurance, or other security, but the latter are based upon the idea that to use compulsion in a slightly different way, and on a somewhat different basis, is more reasonable and less oppressive legislation.

These latter, (Safety Responsibility) Laws and the Massachusetts law, differ fundamentally on this point: that while the earliest compulsory insurance law required all to insure on a certain day, the Safety Responsibility Laws leave a motorist alone until he has been convicted of a serious violation of the Highway Traffic Law or Criminal Law, or has caused serious or substantial injury through motor accident. They then require security against future casualties, and as a further condition of the restoration of his license, that he shall pay the damages caused by the accident which has brought him within the scope of the legislation.

This difference makes the Safety Responsibility Law more logical, more acceptable, more workable, and less oppressive, and has the great merit of only affecting motorists who have themselves demonstrated that they are careless or reckless. Thus, the vast majority of careful drivers are untouched by the law and can remain outside it as long as they do not bring themselves within it. The argument so freely used in favour of the Massachusetts law, which requires all to have insurance if they wish to drive on the highway, and so takes care of the consequences of the first accident, ignores the fact that the Safety Responsibility Laws do the same, and that the way in which they do it is much more effective; namely, by suspending the driving license until the unpaid damages for an earlier accident are settled.

Notwithstanding this, the question is plausibly put in this way: Should a man be permitted to operate a dangerous instrument, one which is likely to cause death and destruction on the public ways, and not be in a position to compensate for death or the injury which he has caused? The answer to such a question is, naturally, "No", but, as I have found out, the answer is based on the assumption that a compulsory insurance law is the only law which attains the desired result. While it operates to place a burden on all owners of motor cars, on account of the evil deeds of certain of their number, the same result is obtained, in a much more acceptable way, by the Safety Responsibility Laws. In the latter case no one is compelled to insure until he brings himself within the law by causing an accident more or less serious, or by driving recklessly, or in a drunken condition, etc. If coupled, as it should be, with the proviso that not only should insurance be taken out by the offender for the future, but that he should satisfy any judgment which is standing against him before he has secured insurance would achieve the beneficial and desired result without coercing others. People who have not caused injury may never bring themselves within the law, owing to the care they exercise.

The best opinion on Compulsory Insurance Legislation as for example that of the State of Massachusetts, is that the psychological effect of compelling everyone to take out insurance is the reverse of making them careful, for everybody knows that everybody else is

insured, and that in case of an accident the insurance company, and not the person causing the injury, will have to pay it. The more this view is considered, the more reasonable it becomes. Drivers of heavy cars, trucks, buses, etc., are very apt to fall into this habit of mind, and so are private car owners — namely, that being insured against personal responsibility, their pocket will not be touched in consequence of any act of theirs, and, as criminal negligence can seldom be proved, they feel that they are safe from the reach of the criminal law. I found no one, either in Massachusetts or elsewhere, who would venture to assert that their Compulsory Insurance Law had any effect on reducing the number of accidents. It is true there were no available definite statistics, and the closest mode of calculation was to ascertain the number of accidents before the law came into operation, and to compare it with the number since, making due allowance for the known increase in the number of cars operating in Massachusetts. Viewed under these conditions, the number of accidents appeared to be much the same before the law as after.

In the Report of the California Committee, dated January, 1929, the following data is given from the Massachusetts record:

“In 1927, the year after the law went into effect, fatalities resulting from automobile accidents numbered 698, as compared with 681 in 1926. Injuries were 32,922, as compared with 24,904 in 1926. Collisions reported numbered 33,938, as compared with 26,769 in 1926.

“While more complete reports may have been prepared by the police authorities in 1927, certainly the record makes no showing of a reduction of accidents. The number of personal injury claims filed with the Insurance Companies in 1927 was 48,519, as compared with 14,678 claims filed in 1926, against the insurers of 30 per cent. of the motor vehicles in the State.”

This indicates that while reported accidents numbered 32,922 in 1927, the Insurance Companies of 30% of the motor vehicles were faced with claims just 50% more in number than the reported accidents would indicate.

VI. SAFETY RESPONSIBILITY PLAN:

I have already mentioned that I placed before myself the principle that the first consideration must be safety, that is, avoidance of accidents, the inculcation of care, road sense, and consideration for others. To this all laws and regulations should be directed. The general impression that laws can be so framed that an ideal state of affairs on the highway can be induced, is, I am afraid, merely utopian. While highway traffic legislation is essential, it can only deal with breaches of the law and consequent punishment, so that the aim should be to devise a scheme wherein the law will act, not only on past offences, but will be so used that it will conduce to, and indeed, compel prudence, and require compensation for the fault which has injured another.

I shall deal later with the idea that the Government should step in and provide or accumulate a huge fund, out of which injuries due to the faults and crimes of reckless users of the highway, might be,

much to their comfort and pleasure, compensated while they continued their career unmolested by the powers that be. Fortunately there are in this country businesses of a nature and quality that naturally would undertake, and do undertake, insurance against the risks incurred or suffered from motor traffic. If, then, they could be placed in such a position as to assist, not only in carrying these risks, but actually helping to establish and enforce safety laws and regulations, it would seem that a solution would be brought about, of two great problems of motor traffic: — one the inculcation of carefulness in motorists, and their exclusion from the road on proof of their lack of this quality; and secondly, the securing of compensation of those injured by negligence of a motor driver.

In the evolution of the basic idea to be found in the American Automobile Association Bill, (hereinafter referred to as the "A.A.A. Bill") which I outline in this report, it is interesting to observe that while the compulsory insurance idea has prevailed, it has done so only in such a modified form that in providing for the second problem mentioned above, it has been so associated with the provisions and penalties found in the Highway Traffic Act as actually to put pressure on reckless and dangerous motorists, tending to make it, on the one hand, worth their while to insure, and on the other, to hang over their heads the fear of inability to secure insurance, the only alternative to which will be the out of date plan of giving a personal security bond, guaranteed by personal friends, or the serious problem of depositing money, or money bonds, to a substantial amount.

The fact of this co-operation between the Civil and Criminal law, and the business of insurance, in furtherance of safety, while not to be wondered at, as that business was already in possession of motor insurance, is rather remarkable, as the first conception of compulsory insurance was, that while care might be induced merely by the taking out of a policy, yet it was not safety, but the necessity for the indemnification of the injured, that was the crucial and only cause for the earlier legislation on the subject.

That early idea, now superseded in the United States by that of combining the safety provisions of the Traffic Act with indemnity for the injured, seems to have been the main reason why compulsory insurance sections were introduced into the English Bill. I do not find any trace of its being in any way brought in as a safety measure, as the Government have intimated that if offenders can get insurance, notwithstanding they are bad risks, they will not object, and I find that in the Bill there is no proposal for an examination for drivers, nor any preliminary except the signing of a declaration of age, and that there is no order of a Court disqualifying the applicant, and that no conviction stands against him. It was suggested by the National Safety First Association that an applicant for a license should also be required to sign a certificate, when getting his license, that he is aware of the rules and courtesies of the road, but this is not provided for in the Bill.

The adoption of compulsory insurance for all motorists in the English Bill, is probably accounted for by the fact that 90% to 95% of the English motorists are already insured for liability, both as to personal injury and property damage, as appears from the following

extract from the evidence of Mr. Evans, representing the underwriters of Lloyd's, given before the Royal Commission:

"You say that 95% of motorists, excluding motor cyclists, are already insured against third party risks? A. Yes. Q. Which leaves 5% of the people which you would regard as undesirable risks? A. No, I should not say they are all undesirable. Of that 5% there might be a proportion which choose to run their own risk and do not insure."

The Accident Offices Association also gave evidence through Mr. McConnell, Manager of the Royal Insurance Company, who said:

"I think there is a great difficulty in finding out what percentage of cars are insured, but we have a good deal of information, and we know that the percentage that is insured is something approaching 90%. We know of those being insured, although we have no facilities for finding out in all the channels, and therefore we must assume that there is a definitely larger percentage than that."

Q. You can state definitely that it is at least 90%

A. We know that it is approaching 90%, but how much nearer 90%, or above 90%, it is quite impossible for us to find out. We have tried to find out, but we cannot get at all the channels."

It may be possible that in England, and elsewhere on the continent where the percentage of cars insured is so large, that they do not have to contend there with the enormous number of persons who own cars on this continent, the larger number of which are not in the hands of well to do owners and so are not insured as they are in England. The penalty in England for not taking out insurance is made very large.

Without burdening my Report at this point with further references, I would like to recall that in 1929 the Report of the Joint Legislative Committee of the Senate and Assembly of California—the latest, most exhaustive, and complete survey of laws of this nature—has stated its conclusions in these words:

"The Committee is convinced that it is possible to prevent a large part of the present loss in property damage, personal injury, and death, by determining safety measures and motor vehicle legislation in accordance with certain definite policies or guiding principles. As example of such principles, with which all recommendations in this Report conform, the Committee suggests the following:

1. Compulsion and adequate uniform methods of accident reporting; collection and analysis of accident and traffic statistics; study of accident causes and trends, and of traffic problems and regulations. In short, acquisition of the knowledge that must be the basis of intelligent regulation.
2. Continuing revision of the Motor Vehicle Law, based on the factual findings indicated above, and in accordance with a progressive program for legislation in furtherance of public safety, and for effecting uniformity of law within the State and with other States.

3. Vigorous, unremitting, and uniform enforcement of the Motor Vehicle Law throughout the State, by the local police within their jurisdiction, and elsewhere by state-wide motor vehicle police, operating under exclusive State control; rigid investigation of all serious accidents; and, as far as may be effected, unfailing prosecution and uniform punishment of violations of that law.
4. Broadening of liability of persons permitting, or otherwise responsible for negligent operation of motor vehicles; revocation of licenses of persons failing to satisfy final judgments, establishing their negligence in the operation of motor vehicles; and denial of re-licensing to such judgment debtors prior to satisfaction of the judgment, and establishment of security against future liability."

They recommend amendments to their laws in many respects, following and, in some measure, amplifying, the principles and provisions of the A.A.A. Bill, and conclude as follows:

"The Committee believes that both as an accident prevention measure, and as a means of furthering the indemnification of innocent victims of motor vehicle accidents, the recommendation here proposed is a long step in advance of similar legislation yet enacted in any other State of the Union."

I am glad to find that my conclusions as to the Safety Responsibility Laws have, except on one point, the support of the members of the Ontario Motor League as represented before me at one of the Sessions of the Commission. They agree that safety and accident prevention are, or ought to be, the cardinal object of any such law. They take issue with that provision of the A.A.A. Bill, of which I approve, which requires a person who has an accident after the law comes into force, and fails to satisfy a final judgment therefor within fifteen days, not only to show financial responsibility for future accidents, but also to pay the judgment before his license is restored. They consider that too severe.

Let us consider the basis on which such an objection rests. It assumes that it is unfair to the motorist in question. Is it? In the first place the unsatisfied judgment to which it refers must be one based on liability for damage caused by the motorist, after he has had ample warning of the new law. Is there any good reason why it can be said to be unfair to him that he should be required not only to guarantee his financial responsibility for the future, but also to make good the present damage which he admittedly has caused? He has had ample opportunity to protect himself by insurance in the meantime. If it is necessary under the law to require those who drive to the public danger and cause accidents, to give security for the future, why should they not be required to pay for an accident, if any, caused by their negligence and happening after the law became effective as a condition of their privilege to continue to drive on the highway? If accident prevention requires one lapse to be penalized by requiring future security, then it should logically call, not only for future security, but also, where an accident has resulted before insurance is secured for the payment of the damages caused by that accident.

Indeed in my judgment, on principle it might well be applied to compel the applicant for a license, or for its renewal, to show an absolutely clean sheet so far as unpaid damages for motor accidents caused by him. Although I do not intend to recommend more than that the person causing an accident should pay the damages caused by that accident, as well as giving security, it is worth considering the further application of what may be called "the clean sheet rule".

If prevention is better than cure and an examination before license should be applied to an applicant as to his fitness, is not the fact that he has caused injury or damage to someone previously, a record which should either cause him to be refused his license, or as the price thereof, to provide himself with a clean sheet? Is it also urged that there is but a small percentage of unsatisfied claims, because the records in the United States and here, show that only a small number of persons have not taken out voluntary insurance. But as was said before me by Mr. Phelan, representing the Ontario Motor League:

"Safety responsibility legislation strikes at the misconduct of a reckless and criminal minority. The irresponsible operator is of two types, the one who is indifferent to the safety of others on the highway, and the other who is unable to compensate for the damage he does."

If that is so, and I quite believe it, why should this minority of either type not be bound to qualify either as reformed and careful drivers, or else as financially able to compensate others, and if so, why is not the antecedent and unpaid liability just as valid a factor in determining whether the second type is able to compensate others, and why should responsibility be confined to future accidents causing injury and damage, if the class as is described above is only a very small, though dangerous, one?

I understand that Mr. Phelan's statement before me that Compulsory Insurance would cost the Province (I suppose this meant the motorists of Ontario) a premium expenditure of \$9,000,000. a year, basing it on a registration of 600,000 motor cars, the premium for each being estimated at \$15.00, referred to Compulsory Insurance for all motorists, as in the Massachusetts plan. It is not in any way applicable to Safety Responsibility Laws.

The reason, however, why I prefer to follow the A.A.A. Bill and only require payment of the damages caused before insurance is secured in addition to security for future damage, is that the proposed law which I submit, will afford ample opportunity to every motorist to protect himself against the risk of losing his driver's license by securing public liability and property damage insurance before the date on which my recommendation, if accepted, will come into force. That date I think should not be earlier than September 1st, 1930. Anyone who neglects to procure insurance may be assumed to have knowledge of the risk he runs. In any event I cannot but think that the members of the Motor League will agree with my recommendation, when its effect and the reason therefore have been fully realized by them.

I myself consider this provision respecting unsatisfied judgments for accidents occurring after the law comes into force, with modifications in favour of the judgment debtor authorizing payment of judgments by instalments with renewal of license, which are included in the Draft Bill appended to this Report, as vital to the whole scheme of the law. It was first proposed in Pennsylvania (and thus came to be known as "The Pennsylvania Plan") long before the A.A.A. Bill was drafted. It is now the law of upwards of fifteen states of the United States. It has been included in every Safety Responsibility Law which has so far been enacted, and has been adopted in other States which have not yet endorsed the other features of the A.A.A. Bill. It was proposed in Ontario in 1929, as an independent self-contained measure, by Leopold Macaulay, M.P.P.

It is important to the scheme of the Act as a safety measure. If this provision is not enacted the reckless motorists will understand that the worst that can happen to him under the Safety Responsibility Law, if he becomes involved in an accident, is that he will be required to show evidence of financial responsibility for the future, which he can probably do by buying an insurance policy.

If, on the other hand, this provision is included in the Bill he will realize that he must drive carefully and avoid accidents lest he lose his privilege of driving a motor car (which may be his means of livelihood) by reason of inability to pay a judgment obtained against him. Of course, he may protect himself by procuring insurance before the accident occurs, but even in that event he may appreciate, or soon learn, that the company may cancel his policy on ten day's notice, that evidence of financial responsibility is essential to his right to continue to drive on the highway, and that other insurance companies may be unwilling to issue a policy to a driver whose insurance has been cancelled by another company.

The provision of the Bill respecting unsatisfied judgments is essential to the purpose of the Act in assuring compensation, to the greatest possible extent, to the victims of motor vehicle accidents. The A.A.A. Bill was calculated to provide a very powerful inducement to every motorist to buy insurance *voluntarily* because of the risk the motorist otherwise runs of being *permanently* debarred from the highways by reason of inability to satisfy a claim judgment. It has been testified before me that, in States such as Connecticut or New Hampshire, where Safety Responsibility laws have been in force for upwards of a year, from eighty to ninety percent of the motorists have voluntarily bought insurance. Without the provision in the Bill respecting unsatisfied judgments, where is the inducement to take out insurance in advance of the first accident? All that would remain would be the necessity of showing evidence of financial responsibility against *future* accidents.

I think no exact or trustworthy data can be obtained, as suggested before me, of the claims for damage through motor accidents, which remain unpaid, or are non-collectable. I have made due enquiry by means of a questionnaire to every County Sheriff and local Master,

County Judge, and Clerk of the County Court, and every law firm in the Province, and the results are as follows:

As of February 12, 1930.

Where both answered 39 returns.

1. How many judgments for damages for personal injury arising out of automobile accidents in Ontario have been obtained in your office since January 1st, 1927, which still remain unsatisfied:

- (a) In whole 73
- (b) In part 25

2. What amount is owing on the aforesaid unsatisfied judgments?

Please set these out separately and immediately following the amount now owing, state the amount of the original judgment, *e.g.*, \$3,200, originally \$3,500.

Total now owing \$70,349.93—originally \$98,659.95.

Where both answered 34 returns.

3. How many judgments for property damage claims amounting to more than \$100 each, exclusive of costs, arising out of automobile accidents in Ontario have been obtained in your office since January 1st, 1927, which still remain unsatisfied:

- (a) In whole 63
- (b) In part 11

4. What amount is owing on the judgments mentioned in Question Number 3? Please set these out separately, and immediately following the amount now owing, state the amount of the original judgment, *e.g.*, \$1,200, originally \$1,500.

Total now owing \$16,884.87, originally \$18,133.78.

Where both answered 100 returns.

5. How many valid claims of clients for damages arising out of automobile accidents in Ontario have you had in your office since January 1st, 1927, where court action has not been commenced or where such action has been abandoned prior to judgment by reason of the financial irresponsibility of the person liable:

- (a) Number of claims for personal injuries . . . 327
- (b) Number of claims for property damage amounting to more than \$100 537

(Also see return of J. A. T. Plouffe)

Answered "several." (a) 3; (b) 2.

6. What in your opinion would be the approximate total amount of all the judgments your clients would probably have been able to obtain had they instituted court actions and—or proceeded to judgment against those persons mentioned in the previous question?

- (a) In the case of personal injury claims \$250,350.00
- (b) In the case of property damage claims \$125,256.40

Where both
answered 60
returns.

7. How many claims of clients for damages arising out of automobile accidents in Ontario have you settled in your office since January 1st, 1927, as a result of the financial irresponsibility of the person liable where your clients have received amounts less than those to which you believed they were entitled?

(a) In the case of personal injury claims . . . 190

(b) In the case of property damage claims . . . 292

Answered "several."

8. What, in your opinion, would be the approximate total amount of what your clients would probably have been able to obtain in addition to the amounts for which the claims mentioned in the previous question were settled had such cases proceeded to Judgment?

(a) In the case of personal injury claims
.....\$102,300.00

(b) In the case of property damage claims
.....\$55,085.00

9. Please give the name and address of each member of the Ontario Bar in respect of which this return is made:

Answers to questionnaire where return is
"none".....137

Total number of answers to questionnaire including
letters.....384

From the above, not much certainty can be drawn as to what amount of damages for injury remains unpaid or uncollectable in the Province, nor how many have been injured and have either failed to recover judgment or to seek any remedy at law. But small or large is not, to my mind, the question. Any one injured should get whatever compensation his condition demands, and to ignore this right on the plea that one person may have to pay an insurance premium, and to make a proper settlement, is to favour the offender because he is impecunious, at the expense of the other whom he may have deprived of his means of livelihood, and this for no good or sensible reason for the distinction. As tersely put by one Toronto Newspaper, "The poor man who is the victim of the poor man's car is without recourse."

In California a similar effort to ascertain the amount of uncollected or uncollectable claims was made with such poor results that no reasonable conclusion could be drawn from it, and while I acted on the suggestion made to me I had not expected it to be more successful.

The Canadian Automobile Underwriters' Association have also strongly opposed compulsory insurance for all motorists in a communication to me dated the 16th December, 1929. They commend the Safety Responsibility laws such as those in force in Connecticut and New Hampshire, in these words:—

"These laws are called safety-responsibility laws in distinction from compulsory insurance. They are primarily intended to drive from the roads irresponsible and negligent persons who have demonstrated their unfitness to operate a motor vehicle upon the

highway, and their financial irresponsibility. In so doing, they contribute immediately to public safety of other motorists and pedestrians who use the highways in a lawful and careful manner. These laws impose a rigid discipline upon motorists using the highways. Strict enforcement of highway regulations and severe penalties for reckless and incompetent drivers are joined with a systematic and thorough system of recording all convictions for offences against public safety and all failures to meet civil obligations incurred by negligent motorists. Provision is made for inter-state exchange of records of violations of highway safety laws by non-resident drivers.

Associated with the disciplinary provisions is the requirement that those who have by their own record demonstrated their disregard of public safety, or their unfitness to operate a motor vehicle, or their inability to answer in pecuniary damages, for injury which they may have caused to persons or property, are required to demonstrate their financial responsibility as a condition of the continuance or renewal of their driver's permit.

A great virtue of such laws is that they confine penalties and discipline to those persons whose records show that they deserve such penalties and discipline, while they still leave the great body of the motoring public, who drive safely, with due regard to the security of others, and who satisfy their civil obligations for damages, unaffected and unpenalized, by the provisions of the Law. At the same time their indirect effect is to increase the proportion of motorists who voluntarily and willingly undertake to protect themselves and the general public by insurance of the automobile risk."

They submit as applicable to Ontario conditions the following suggestions:

- “1. Thorough-going review of the present record system of the Ontario Department of Highways, with the purpose of making more effective and complete a centralized driving record of all persons holding licenses from the Department, in order that a record of all convictions for violation of the Highway Traffic laws in relation to public safety may be accumulated in a form available and useful for consideration by the Registrar in issuing and renewing licenses.
2. That drivers' licenses should not be issued or renewed by the Department of Highways until the record of the driver on the files of the Department has been reviewed and the merits of his application considered by a competent official.
3. That drivers' licenses should be immediately and automatically suspended for major offences against public safety, including:
 - (a) Driving when under the influence of intoxicants or drugs;
 - (b) Driving on a highway recklessly, or at a speed, or in a manner dangerous to the public, having regard to all the circumstances;
 - (c) Criminal negligence in driving;

(d) Leaving the scene of an automobile accident in which personal injury occurs, without making identity known;

(e) Failure to satisfy a judgment in a civil action for damages arising out of an automobile accident.

4. That the Highway Department should undertake a wider jurisdiction in the organization and regulation of traffic throughout the Province, with the objective of public safety upon the highway."

The position of the American Automobile Association in formulating and recommending its Safety Responsibility Bill was stated by them in December, 1928, in a leaflet attached to the printed copy of the Bill which they proposed. In this pamphlet the Association affirmed that it had been, and still was, opposed to compulsory liability insurance as it had been advocated in the United States in recent years because it had not proved its value as a safety measure, and in this particular application had furnished but slight relief to the injured. They then go on to say in reference to the Bill:—

"In the opinion of the committee, however, the legislation herein contained for adoption where needed will serve the public interest in a practical manner, and place a direct responsibility where it should be placed, without forcing upon a large proportion of the population of this country a financial burden which in itself would not achieve the results that all good citizens desire.

"Through its special National Committee of Seventeen and its Executive Committee, the American Automobile Association has framed a Safety-Responsibility Law as a constructive measure designed to protect all the users of the highways against the reckless, incompetent and irresponsible driver.

"Directed primarily at the menace to person and property, from a reckless and criminal minority, the Safety-Responsibility Law seeks to control this minority. To accomplish this purpose, it sets up simple legal machinery whereby the State, as the unit of local government is empowered to deprive of the use of the highways those operators who have demonstrated that they are an actual or potential menace to their fellow motorists and to the public in general.

"Restoration of the right of such people to use the road is made contingent in this proposed law on the establishment of specific safeguards against possible future damages to persons or property. That is, of course, in addition to whatever disabilities, restrictions and penalties are provided for in the motor vehicle codes of the various States for such offenders. In other words, the Safety-Responsibility Law, while embodying several fundamental principles, is in the nature of supplemental legislation.

The proposed law embodies the following four cardinal principles:

"First, it provides for the enactment of the Uniform Vehicles Operators' and Chauffeurs' License Act by all States that do not now have such a law on their statute books. The control of the

privilege of driving rests with each State, and it is obvious that control is more complete in those States requiring drivers to secure an operator's license.

"Second, it provides for mandatory suspension of the driving permits of all persons found guilty of serious violation of motor vehicle laws. In addition to whatever penalties the State laws provide for these offenders, the Safety-Responsibility Law definitely bars them from the road until they have established satisfactory proof of their financial responsibility against future injuries to persons or property.

"Third, it provides for the suspension of the driving rights of all persons against whom a final judgment establishing the driver's negligence has been legally rendered and who have failed to meet the judgment. This suspension is to remain in effect until the judgment has been satisfied and until a future guarantee of financial responsibility has been established. While this provision does not absolutely guarantee the payment of a final judgment, the prospect of permanent expulsion from the road is such a compelling alternative that it will inevitably tend to secure the essential payment of such in time to reduce unpaid judgments to the vanishing point.

"Fourth, it provides for the insertion in the driver's license law of every State of a proviso which will forbid the issuance of a permit to any person whose right to drive is at that time suspended in any other State because of failure to respond in damages or because of other serious violations of motor vehicle laws. This, in effect, provides for inter-exchange of suspension rulings, as between the States, and would render the disability nationally reciprocal.

"The Committee, which formulated the bill has had constantly in mind the fact that the streets and the highways are public assets; that the automobile is a vital factor in the country's business, social and economic life, and that the large mass of law-abiding, careful drivers should be permitted the use of the streets without subjecting them to unreasonable burdens, financial or otherwise.

"For this reason, the Safety-Responsibility Law is frankly directed at the small minority of reckless and irresponsible motor vehicle operators to whom are chargeable the mounting toll of loss of life and injuries to persons and property."

I am strongly impressed with the idea, which seems to be in the mind of many with whom I discussed the matter, that in the laws relating to motor traffic in the various adjoining or nearby provinces, or States of the Union, there should be some provision for reciprocity in the practice of dealing with motor accidents caused by motorists from other provinces, or foreign motorists. The result of this would be that motorists of both countries would, at all events in the eastern part of the continent, become familiar with the requirements of the reciprocal laws, which on this hypothesis, would be similar to those governing them in their own Province or State.

This is one of the reasons why I am rather in favour of bringing our legislation in line with any reasonable and appropriate provision

on the subject of motor vehicles owned in other Provinces, or foreign cars, in the laws of the adjoining Provinces or States. Such legislation would facilitate the passage of tourists from Ontario through other Provinces or States, assuring citizens of this Province that treatment with which they are familiar will be accorded to them when beyond the bounds of Ontario. But whether or not such legislation of another Province or a foreign State was sufficient to warrant reciprocal treatment here must always be determined by the Minister of Highways.

VII. REGULATION OF INSURANCE RATES:

I have taken great care to ascertain the views of all the witnesses who testified regarding Compulsory Insurance in any form in regard to insurance rate regulation in general and also as to whether rate regulation by Governmental authority was a necessary concomitant of compulsory insurance. Some gave expression to the view that, when any compulsory law was passed requiring any class of the people to pay for procuring a particular thing, there ought to be the same government regulation of the price, or some public standard, and that the price should not be left to be regulated by those who offered it for sale, as in the case of compulsion there was no chance for competition. On the other hand, it was pointed out that, while speaking generally such a principle might be sound, in this case no general fixed premium could be settled for all parties, because of the various coverages, the extent of liability, the different mechanical equipment of the cars, territorial differences in exposure to risk, the difference in the extent of liability (in view of the insurance having to cover third parties of different classes), and various other reasons.

I think the views of those who spoke on the subject, as representing insurance and other interests, may be summed up in some such way as this: that while they approved the principle of rate regulation, as exemplified by the New York rating law, the majority felt that the principles involved in rate regulation had no direct relation to compulsory insurance, as found in a Financial Responsibility Law; in other words, that the enactment of a Financial Responsibility Law would not, of itself, make rate regulation necessary.

Any report, however, involving a recommendation for legislation, the effect of which would be to require motorists to buy automobile insurance, would not be complete without reference to the cost of that insurance and the manner in which its reasonableness is to be assured.

In New York state, for many years, the Superintendent of Insurance has been empowered to disallow rates if they were excessive, inadequate, or unfairly discriminatory, while in Connecticut there is no power given to the Commissioner of Insurance to enquire into, supervise, or regulate premium rates—he being limited to the right to ascertain the financial responsibility of insurance companies transacting business in Connecticut.

This difference in State policy is probably explained by the proximity of Connecticut to New York state, where almost all the Connecticut companies carry on business, and where insurance rates are made for practically the whole United States by rating bureaus

in New York, under the strict supervision of the New York Insurance Department. Any complaints of conditions in Connecticut can thus be promptly referred to the rating bureaus in New York City, generally with good results.

I am, as Commissioner, presently engaged in an Enquiry into the reasonableness of certain rates in this Province on automobile casualty insurance, and into the existing laws in Ontario with reference to the regulation and supervision of insurance rates generally.

Those rates, the reasonableness of which is now before me, were raised to a degree which seemed to demand some explanation and public consideration, and while the working of the present Ontario law, respecting the regulation or supervision of rates generally, by the Superintendent of Insurance here, will have to be dealt with in a later Report, I think it is not only wise, but necessary, that I should, in this Report, give some consideration to that important question now, especially as I have progressed sufficiently far as to convince me that the present Insurance Act should be amended at the present Session, so as to give authority to the Superintendent of Insurance to order, after due notice, and a hearing before him, an adjustment of automobile insurance rates whenever they are found to be excessive, inadequate, unfairly discriminatory, or otherwise unreasonable.

I am so advising the Attorney General.

This conclusion is enforced by a consideration of the probable practical results which would follow if such a recommendation were left entirely out of this Report.

The present increased rates came into force on the first of February, 1929, and were fixed by the insurance companies in December, 1928, and January, 1929. They have been enforced, pending this Enquiry, for over a year, and whether I am able to complete my Enquiry during this year or not, they will be enforced and exacted, not only until my Report is made, but until the Legislature meets again in 1931, and until, thereafter, any powers then given, if any, can be properly exercised, unless some provision is made during the present Session.

My view is that whether a Safety Responsibility Act is passed during the present Session, as I hope it will be, or not, some adequate provision should be made, so that, if the rates now in force, in whole or in part, should be deemed unreasonable, they may, and can, be dealt with and allowed or disallowed in 1930 and before 1931 or 1932.

I am impressed with the fact that it would be a doubtful experiment to launch a Safety Responsibility Bill, throwing upon offending motorists the duty of procuring insurance, without a corresponding provision securing them the right to obtain it on terms fair both to the insurance companies, and to themselves.

I fully realize that, before the Enquiry is concluded, much additional testimony on the subject will have been presented, and there may be additional desirable amendments to the Insurance Act, relating to the regulation and supervision of insurance rates in all classes of insurance, and I am not attempting to define or forecast them, but it is as well to recall that my colleague, Mr. Justice Masten, who some

ten years ago investigated the fire insurance business and rates, made the recommendation that insurance rates be filed with the Superintendent of Insurance, who should have power to prohibit unfair and discriminatory rates. In the light of the evidence before me, and of his Report, and the greater advantage I have had in obtaining the experience of the years that have elapsed since his Report, I feel sure that my recommendation is neither premature nor wanting in fairness, either to the public or to the insurance companies, and it provides a reasonable way of ensuring these ends.

I may also point out that my appointment, as a special Commissioner a year ago, to investigate the reasonableness of automobile insurance premium rates in the Province is ample evidence that the existing powers of the Superintendent of Insurance are not sufficient to enable him to determine, and if necessary order an adjustment of, insurance premium rates in any particular class of insurance. If such powers had been vested in him the present inquiry would have been unnecessary. Insurance rate-making is a peculiarly technical matter, the supervision of which must be undertaken by experts from month to month and year to year, in order to be effective. If the powers I am now recommending should be given to the Superintendent had been vested in him in February, 1929, when the public liability and property damage automobile insurance premium rates in the Province were increased 50%, he would have been in a position to know almost immediately if the increase in rates was reasonable, and to have ordered their adjustment, if, after due investigation and a hearing, and subject to appeal, he had found them unreasonable.

In the absence of this power the increased rates of the Insurance Companies have been in force upwards of a year, and I am not yet in a position to make any finding as to their reasonableness.

VIII. STATISTICAL RECORDS:

I have also recommended another amendment to the Insurance Act, concerning which a few words of explanation in this Interim Report seems desirable. I have suggested that a new Section be added as 69-A, requiring all insurance companies transacting automobile insurance in Ontario, to keep such records of their automobile premiums, loss and expense costs, as the Superintendent of Insurance may require, and to have them compiled and combined for the information of the Department of Insurance in such form and manner as may be prescribed.

This is designed to secure statistics in such form, and containing such information, as will enable the Provincial Insurance Department to have before it material based on, and conforming to, the principles of scientific rate-making or rate-revision; in other words, to require that the records which are vital shall be made up according to a standardized plan so as to reflect the exact cost of insurance and not leave the Insurance Department dependent on the various modes and sorts of experience data on which some managers of companies seem content to act.

I may explain that, at the outset of my inquiry into the reasonableness of the 1929 automobile insurance premium rates in Ontario, I

was confronted with the major difficulty that the majority of the insurance companies transacting, in the three or four years immediately prior to April, 1928, upwards of sixty percent of the business in the Province, had failed to establish any real system of cost accounting in their offices, and were thus quite unable to produce before me any reliable statistical records showing the cost of automobile insurance in Ontario. The rate-making procedure of the Canadian Automobile Underwriters' Association contemplated the making of rates on the basis of a statistical record of loss cost experience, and its by-laws required its member-companies to keep such records according to a uniform statistical plan, but it developed that the majority of the companies were not members of the Association during that period and had kept no useful records of their own experience, and that even companies, members of the Association, had failed to keep the required records and contribute their experience to the Association.

I found that, so far from being able to examine the rates then in force in the light of any useful data, I had to deal with a condition in which more than seventy percent of the automobile insurance in the Province was being written at rates fixed by the Canadian Automobile Underwriters' Association, and more than ninety percent at rates based directly on the rates of the Association, upon defective experience, and not the result of any plan capable of comparisons between the results of the businesses of the various companies.

The only solution to the difficulty appeared to be to order the companies to go back over their old policy copies and original records and extract the information necessary to compile proper records of their loss cost experience in recent years. I so ordered. This necessary action not only caused the companies inconvenience and expense, but it delayed the investigation more than six months, and records of the character upon which the rate-making procedure of the Association purported to be based, and which should have been available to me at the opening of my investigation almost a year ago, have only come into my hands within the past thirty days.

Many of the insurance company managers seem to fail to appreciate the importance of accurate statistical data as a basis for rate-making, and the necessity of keeping such data accordingly to a uniform statistical plan. It is time that the companies realized that their right to combine to make rates should be conditioned upon an undertaking to keep such statistical records of their loss and expense costs as are necessary to make and judge the reasonableness, or discriminatory character, of the rates they promulgate and charge.

I am most anxious that the system now enforced by my order, and now being followed, should be continued. Unless legislation is had at once the companies will fall back into their old ways where every company is a law unto itself, and all the expense, time and anxious enquiry will be thrown away upon the rates of only one year—1929.

It is no hardship on the companies now that they have begun to keep records in scientific and useful form, to go on with the system, and any lapse into methods which are the reverse of what is now in vogue, will result in chaos and inability, except by another Enquiry, to deal with the rates of 1930 or 1931, or any other subsequent year.

For these reasons I have recommended the addition of Section 69-A to the Insurance Act, in the terms set out in Appendix "B" to this Report.

I make the recommendation now, rather than later in my main Report, because there is now available, as a result of the voluntary action of some of the companies before this Enquiry opened, and as a result of my orders respecting the remainder of the companies since this Enquiry opened, a complete and accurate record of loss cost experience data, dating from the first of January, 1927.

The value of such records increases directly with its unbroken volume in terms of years. It would be unfortunate if this chain of experience should be permitted to be broken between the submission of my Report, and the Session of the Legislature in 1931. And yet I have no authority to order the companies to keep their experience after the work of the Commission is terminated.

Accordingly, I make my recommendation now, in order that it may be acted upon at the current Session of the Legislature.

IX. CONCLUSIONS AND RECOMMENDATIONS:

(1) *Amendments to Present Motor Vehicle and Insurance Laws.*

The physical conditions in the neighbouring State of New York and the types of cars in use, are very similar to those in Ontario, while the percentage here of persons to be affected is much the same as those in that State, namely:—from 70 to 75 percent of the motor owners, whether population or the total of motorists is regarded. The same is true, as I understand, as to the number of the different classes of injuries caused by motor accidents, though here the statistics are not accurately separated into fatal, serious, disabling, ordinary, or minor. The experience of the traffic authorities in England, and the care with which they have examined into and considered the various problems of traffic control, supervision, and safety in various congested areas, demands very careful attention, yet it is evident that the compulsory insurance sections of the pending Bill are based upon the fact that, as voluntary insurance was taken out by 90% of the motorists, both against personal injury and property damage, the statutory compulsion to effect insurance is only exerted on a small minority, stated in the evidence to consist of either persons or firms of substance, vehicles owned by corporations, such as the Transport Companies, and large manufacturing and trading concerns, who would be in a position to meet their obligations, or workmen, or very small traders who acquire cycles, or small second-hand cars very cheaply.

I have definitely concluded, after much consideration, that legislation introducing compulsory insurance in any form into any community, should not go the whole length that the State of Massachusetts did, but should proceed rather on the lines of the Safety Responsibility Laws and should be largely based on the American Automobile Association Bill, so far as it provides for compulsory insurance on the occurrence of important breaches

of the Highway Traffic Acts or Criminal Law or the causing of fatal or serious injuries.

I believe that the inculcation of care, road sense, and consideration toward others, should be the basis of any legislation here, and I have endeavored to deal with the various arguments and points of view which have been presented to me, and to test them by the principles of safety and carefulness which I have mentioned. The detailed reasons for coming to my conclusions, and the considerations by which they are supported, will be found amply set out elsewhere in this Report.

I have always thought, and I am, after my enquiries, profoundly convinced that, as said by a Canadian writer, "The automobile as an instrument of injury and death, is responsible for one of the most significant groups of personal risks existing in our own personal age," and it is not asking too much that, in dealing with this risk, such legislation tending to personal safety as is reasonable, and therefore, enforceable, should be enacted. This is desirable, not only to induce, but actually to inculcate the habit of caution.

I believe that such laws should contain four main provisions as amendments to the Highway Traffic Act.

- (a) Automatic cancellation or suspension of licenses, both of vehicle, owner, or driver, at a reasonable period after the happening of major accidents followed by conviction or judgment, as provided in the draft Bill, or serious breaches of the present Highway Traffic Act, including using cars for crime, passing street cars to the danger of passengers, moving before traffic lights change, passing intersections where no clear view can be had, and cutting out to the public danger; also that of the "hit-and-run" driver; with the right to revive the license, or to relieve against its suspension (but only after one year, in the case of incapacity to drive safely, due to drink or drugs, which I recommend as a preferable description of the offence to the one at present in our Statutes), vested in the Registrar of Motor Vehicles.
- (b) Evidence of financial responsibility for injury to third parties, and of the satisfaction of any prior judgment for injury or damage for which the applicant is responsible happening after legislation is enacted, to the satisfaction of the authorities, should be produced to them before any application for relief from cancellation or suspension is dealt with.
- (c) Some mode of classification, depending on the individual records, of drivers, by which dangerous and reckless drivers, those incompetent from liquor or drugs from operating a motor vehicle, and those who are constant offenders, may be penalized by being eliminated from the road; and others may be required to pay an extra premium or automobile liability insurance.

- (d) A right in the person suffering injury or damage to bring an action against the Insurance Company which has insured the person causing the injury, in case his judgment against that person is unsatisfied, and that, as the Insurance Company has a right to defend the earlier action, its liability in such an action should be made absolute, with, however, a right to recover against the person insured whatever amount the Company has been compelled to pay the third party.

This last addition, I may add, is substantially an amendment to the remedy given by our present Insurance Act, R.S.O. 1927, C. 222, S. 85. This Section, (S. 85) was a needed step in advance, but when it is proposed to provide three classes of security, namely, a bond by individuals or by a Guarantee Company, and the deposit of security or money, for compensation to the injured party, then the protection in regard to all three must be equal in every respect. To allow the Insurance Company, on resort being had to the policy of insurance, to set up conditions making the policy void, because of some fault, or default, of the person procuring the policy, would be neither fair nor reasonable, as such advantage is not available as to either of the other forms of security. It would defeat the main purpose and effect of the new legislation if it failed to make the Insurance Companies liability absolute as to the injured third party.

This provision is common to the A.A.A. Bill and all other Safety Responsibility Acts, and as well to the present English Compulsory Insurance Bill.

The right of the Trustees in Bankruptcy, under the present state of the law, to defeat that of an injured judgment creditor under Provincial Law, suggests that a request should be made to the Dominion Government to amend the Bankruptcy Act so as to eliminate this anomaly. Such a provision has the approval of the Royal Commission on Transport, and is found in its first Report.

I also recommend certain important amendments to the Provincial Insurance laws respecting insurance rate regulation and statistical records. My reasons are given elsewhere in this Report. The text of the proposed amendments are included as Appendix B. to this Report.

I may urge here that the preferable way of describing an offence under Section 45 of the Highway Traffic Act, which is now: "*Driving a motor vehicle while intoxicated,*" should be as follows:—"*Driving, or attempting, or preparing, to drive a motor vehicle when under the influence of drink or drugs so as to be incapable of having proper control of such vehicle.*" Section 46 should also be altered so as to correspond.

This change is approved by the Royal Commission on Transport in England, in its first Report in July 1929. The question of whether a driver is "intoxicated" is usually a difficult one to solve, and the real, and, in fact, the only essential question, is whether the driver has, in fact, capacity to manage the vehicle properly, unaffected, unimpaired, and unobscured, by what he has imbibed, or otherwise taken, whether pure alcohol or in the form of whiskey, beer, or any other form or substitute, or any narcotic or drug.

For the first offence I think the license should be suspended for at least six months, instead of three months, and for a second offence the suspension should last for a year, and in either case only to be renewed on proof of good behaviour and the showing of financial responsibility. I agree perfectly with the Minister of Highways, and the finding of the Royal Commission on Transport, that fines in these cases are not enough. The opinion of the Royal Commission on Transport was that a fine of £50 should be imposed for the first offence, and £100 for the second, with a suspension of license for six months. It recommended imprisonment as an alternative to a fine in either case. I think the fines in Section No. 46 of our Act should be increased, and for the second offence the penalty of imprisonment should be retained.

(2) *Defects in Massachusetts Law:*

I find that the Massachusetts law, which has now been in force for four years, has proved a disappointment, and somewhat disturbing, both to the public and the Insurance Companies, for the reasons mentioned in various parts of this Report, and its defects are well summed up in a very fair and thorough survey made by the Joint Legislative Committee of the Senate and Assembly of the State of California, issued the 1st of January, 1929, already mentioned, and therefore the latest criticism of its operation up to the end of 1928.

It should be mentioned here that the above Report is regarded as an extremely able document. Its basis is, of course, California's problems, but its motor "experience" is extensive and varied. The Report states:

"California stands second only to New York in the number of its registered motor vehicles, and averages a car for every two persons in the State. Traffic centres chiefly about its two urban centres, and there is exceptionally heavy travel on some half dozen main highways. There is also an enormous volume of commercial trucking carried on, and the State is visited throughout the year by a vast number of tourists who figure largely in the situation."

1. Accidents have increased.
2. The Insurance Companies have no effective means, (notwithstanding the right to appeal) of refusing applicants who are poor drivers. In hundreds of appeals the Court compelled the issue of policies in all except 78 cases.
3. There are some 2,000 to 5,000 (estimated) motor vehicles operating in Massachusetts illegally; *i.e.*, not registered, and without insurance.
4. The cost of insurance has increased, and may reach, if based on sound principles, prohibitive figures, under the Compulsory System; being originally based on records of voluntary insured, who are generally careful drivers.

(NOTE: This view may be modified as "experience" under the new system for further periods of time is developed.)

5. The loss cost has become much higher because of (1) Unreasonable claims; (2) The large and increasing number of false claims.

The Governor of the State makes this assertion: "The fraudulent claims that have been permitted under the working of the Act call for a change in the law."

In 1927 the injury claims amounted to 32,922. They increased in 1928 to 48,519. In the Boston area the rates show this difference:—

1927—small cars \$29, medium cars \$37, large cars \$45.

1929—small cars \$47, medium cars \$47, large cars \$62.

In the Massachusetts farming area the figures are as follows:—

1927—small cars \$16, medium cars \$20, large cars \$25.

1929—small cars \$14, medium cars \$21, large cars \$28

6. The insurance coverage is very limited, not including the injured party if at fault, or where he cannot prove fault in the insured, or where the State of Massachusetts owns the vehicle, or the accident occurs not on a public road. Any further insurance, other than the personal injury, compulsory insurance carried by the motorist, is an additional expense.

The view of the C o m m i t t e e, while recommending a Safety Responsibility Law, deals with Massachusetts' experiment and its outcome, thus:—

"With accident prevention and safety consideration admittedly thrown into the discard as impelling motives for compulsory automobile insurance, the prospect of monetary compensation to the injured remains as its only substantial justification; and the results of the Massachusetts experiment appear to demonstrate not only that it is less effective in this direction than voluntary insurance, but also that the cost is out of all proportion to the benefits derived.

"It is the opinion of the Committee, in the light of present experience, that it will be unwise for the State of California, with the complicated problem that confronts it, to embark upon any such dubious legislation as that in which Massachusetts, with a far lesser problem, has become entangled. In this conviction, as has been noted elsewhere, the Committee is confirmed by the unequivocal opinions of local and nation-wide bodies."

(3) *Dealing with First Accident:*

I consider it is absolutely necessary to provide that, in case an accident happens after the enactment of the proposed law, from which there results a judgment for personal injuries sustained, which, after a certain period remains unsatisfied, the license for motor and owner should be suspended until payment. There is probably a much exaggerated idea of the extent and amount of the losses suffered by uncompensated parties who are injured. Efforts made in various States to ascertain this on some proper basis have failed, as illustrated by the California experience, where the Committee "spared no pains in its effort to ascertain the facts regarding such losses."

To 2,000 questionnaires, or letters, there were only 672 replies. I have made a similar effort, by questionnaire, to all the law firms in the Province, and to the legal offices in each county, and up to date only some 100 or more replies have been received which gave any information which could be intelligently translated into statistics. These have been summarized earlier in this Report.

But I am satisfied that there is a very genuine and general demand for some provision, not only to avoid the apparent anomaly that insurance is not required to satisfy the claim of a first accident after the law becomes effective, but also because, whether actually proven or not, there is, I believe, a widespread concern for even a comparatively small number of injured or disabled people who remain uncompensated for what has happened to them, due to careless and reckless motor driving.

If it is easy to remedy this apparent omission, and it is so, the fact that only a minority are concerned is no reason why any individual should suffer because a reasonable provision has not been enacted for his protection.

(4) *Suspension or Revocation of License:*

The question of the power to suspend or revoke the motor and operator's license has caused me a great deal of consideration. The difficulty is not so much the suspension or revocation itself, but as to who should exercise the power either to suspend or revoke in the first place, and where the power to reverse the suspension or revocation should be placed.

My final conclusion is that the suspension should be automatic in the case of convictions for major offences against the Highway Traffic Law, and on the expiry of fifteen days in cases of unsatisfied judgments. In addition, the Registrar of Motor Vehicles should be empowered to require proof of financial responsibility from any person who has been involved in a motor vehicle accident, and who, in his opinion, is wholly or partly responsible therefor, and should be authorized to suspend all owners' permits and drivers' licenses in such cases until proof of financial responsibility has been given.

(5) *Foreign Cars:*

There seems to be a demand in some quarters for a law which would enable the car of a foreign tourist to be impounded following a motor vehicle accident, until such time as security for the loss and damage caused by the accident is given. I find that no state in the United States has yet acceded to this demand, notwithstanding the numerous laws passed in most of the thickly populated States to protect the victims of motor vehicle accidents, and I believe it would be a mistake to enact drastic legislation of this character until either the problem becomes more acute, or some of the prominent neighbouring states whose tourist problem is just as pressing as that of Ontario, establish a precedent.

Power is now given to police constables, under Section 48 (4) of the Highway Traffic Act, making an arrest without warrant, to detain the motor vehicle with which an offence is committed until the final disposition of any prosecution under the Act, and the same provision contains authority to release the motor vehicle on security for its production being given to the satisfaction of the Justice of the Peace or a Police Magistrate.

This provision affords considerable protection to any person involved in a motor vehicle accident with a foreign car where the accident is the result of reckless driving, or in the course of which any offense has been committed. If no offense has been committed, it seems obviously unfair to assume that the driver of the foreign car is at fault, pending adjudication of a civil suit.

Nevertheless, while I have not seen my way clear to go any further than our present law, as regards impounding the foreign car, I have incorporated in the Draft Bill several important provisions. These may be summarized as follows, and they represent, I believe, a very distinct advance over our existing law:

(1) If a non-resident is convicted of any of the more important offences under the Highway Traffic Act, or under the Criminal Code of Canada, his privilege of driving, or of having driven any car owned by him, is forthwith withdrawn automatically until he has established evidence of financial responsibility.

This provision is calculated to induce non-residents to volunteer evidence of financial responsibility under the act, upon entering Ontario, in order to avoid the risk of having their car immobilized while they endeavour to procure an insurance policy or other proof of financial responsibility in Ontario.

(2) If a non-resident fails to pay a judgment rendered in any Canadian Court his privilege of driving, or of having driven, any car owned by him in Ontario, is forthwith withdrawn automatically until the judgment is paid, and until financial responsibility is established.

(3) The non-resident is authorized to volunteer evidence of financial responsibility, and I have recommended that the Registrar of Motor Vehicles be given authority to accept certificates of insurance extending to Ontario, wherever the policy may be issued, and, if deemed desirable, to issue an official non-resident insurance identification card, and to facilitate non-residents volunteering such proof to his representatives at selected points along the border. This provision is entirely new, and is intended to encourage tourists from other States and Provinces to establish evidence of financial responsibility in advance of any offence or accident.

(4) The Draft Bill contains a provision directing the Registrar to send reports of all orders, convictions, or judgments against non-residents to the Registrar of Motor Vehicles in the State or Province where the non-resident resides. Inasmuch as a comparable provision is contained in the A.A.A. Bill, and inasmuch as the provisions of this Bill are already in force in upwards of twelve of the important States of the United States, it is not too much to hope for considerable relief from this provision in the future, as soon as it is enacted, on a reciprocal basis, because the Draft Bill requires the Ontario Registrar of Motor Vehicles to suspend the driver's license and owner's permits (if any) of any resident of Ontario, upon receipt of official notice that such resident has been convicted, or has forfeited his bail in any other province or state in respect of an offense which, if committed in Ontario, would have been an offense under the Highway Traffic Act or the Criminal Code of Canada.

(5) The Draft Bill also contains a provision with respect to service of notice or process on a non-resident through the Registrar of motor vehicles. This provision does not go as far as comparable provisions in the laws of New York, Connecticut, and other States, but it does go as far as, I believe, our law and practice justifies, and should afford considerable relief in special cases where the motorist has not yet left the confines of Ontario.

(6) *Examination and Licensing of Drivers:*

I recommend that all drivers should be carefully examined as to ability to drive, as well as in their mechanical knowledge of cars, particularly as to their safety in operation, and that a fee sufficient to enlist the services of competent examiners should be provided. Also the age limit of drivers should be raised to eighteen years, and that truck and delivery motor vehicle drivers, and drivers of all cars operated for hire, should be specially examined, having regard to their physical ability, competent knowledge, and record on the road, and that a signed application should be required from all applicants for a license, containing such information as should be required from each class of driver, and that any mis-statement therein should involve forfeiture of the license by the Traffic Department.

Whether or not there should be a physical examination and a test of ability, etc., before a license is granted to drive a motor, the Safety First League in England, in giving evidence before the Royal Commission on Transport, made this statement through Col. Pickard, D.S.O., Secretary of the Safety First League, in answer to questions:

“You do not think, therefore, that some test as to competence before a man receives a license would prove very valuable, from the point of view of preventing accidents?”

“On the facts as we have them, and as the Ministry of Transport and the Chief Constables in Scotland have published them, there does not seem to be very much hope. I have recently recently received from America some statistics in which they claim that an examination before the issue of a driving license has reduced motor fatalities there by as much as 20 per cent.

“That is in the United States? — Yes. The corresponding body to our own in the United States has produced various curves and tables to that effect. I do not think myself it altogether proves the case, but there is the point of the psychological effect that may have on a motor driver to make him realize his responsibilities. We have suggested, as you will see in paragraph 13 of our Memorandum, that he be called upon to sign a certificate, and we believe that the British nation, being a very naturally law-abiding nation, having signed a certificate to that effect, is likely to carry it out.”

Section B. of their Memorandum, referred to in these answers, recommended that:—

“Applicants for driving licenses and vehicle licenses to sign declarations, incorporated on the respective application forms, to the effect that they are acquainted with the rules and courtesies of the road, and that brakes and steering gear are in good condition, and will be so maintained.”

When the present English Bill came to be drawn and presented to Parliament for its consideration, the following provisions were included:—

“Subject to the provisions of this part of this Act, as to the physical fitness of applicants for licenses, the licensing authority shall, on payment of a fee of five shillings, grant a license to any person applying for it in the prescribed manner, who makes the prescribed declaration as to age, and as to the subsistence of any order of a Court made in respect of him under this Part of this Act, unless the applicant is disqualified under the provisions of this Part of this Act for holding or obtaining a license.

“On an application for the grant of a license the applicant shall make a declaration in the prescribed form as to whether or not he is suffering from any such disease or physical disability as may be specified in the form, or any other disease or physical disability which would be likely to cause the driving by him of a motor vehicle, being a vehicle of such a class or description as he would be authorized by the license to drive, to be a source of the danger to the public.

“If from the declaration it appears that the applicant is suffering from any such disease or disability as aforesaid, the licensing authority shall refuse to grant the license.

“The applicant may, except in the case of such diseases and disabilities as may be prescribed, on payment of the prescribed fee, claim to be subjected to a test as to his fitness or ability to drive a motor vehicle of any such class or description as he would be authorized by the license to drive, and if he passes the prescribed test and is not otherwise disqualified, the license shall not be refused by reason only of the provisions of this sub-section, so, however, that if the test proves his fitness to drive vehicles of a particular construction or design only the license shall be limited to the driving of such vehicles.”

There are certain exceptions, such as to invalid carriages, etc., and there is provision for appeal to the petty Sessions against the refusal of a license. To my mind, an examination or test, chiefly practical and thorough, before a license is granted, is an important element to be insisted on, from the point of view of safety. If Col. Pickard is correct, that 83% of accidents are due to the human element, it seems to be a wise course to follow. It takes its place beside the examination of vehicles and the provisions for the carrying of insurance, thus tending to reduce the risk, as one of the safeguards which experience from time to time indicates as helpful. Any test should be made by a competent driver, and the fee for an examination should be such as would induce such an examiner to spend time and pains on the applicant, and there should be specified practical tests, as well as the items of mechanical knowledge.

In Massachusetts the State authorities give the applicants a literacy test in order to “make sure that they can read the English language. Each applicant furnishes his own car for the road test, which consists of a thorough examination of the applicant as to his ability to drive in traffic, to reverse, and to turn his car around in close quarters.”

They have also adopted a stricter examination as to eyesight, and require a certificate from an optometrist, showing whether the sight is normal, and if not, to what extent it is abnormal.

The results, financial and otherwise, are thus stated:—

“Under the present system of examination, we last year examined 158,373 applicants for licenses. At the rate of \$4.00 for each original examination, it will be seen that this brings into the State Treasury a considerable sum of money. For each re-examination of an applicant the charge is \$2.00, and it is not unusual for the same applicant to be examined several times before he finally passes.”

The Canadian Manufacturers' Association, in a communication addressed to me, January 30th, 1930, made the following recommendations:—

“We suggest that a higher standard of driving ability should be required and strictly enforced; further, that a complete driving record of all licensed drivers should be kept, preferably in a central Bureau; and finally, that the penalties for reckless or incompetent driving should be made much more severe.”

I wish to draw attention to the fact that, pending this Enquiry, many of the Judges of the Superior and County Courts, as well as Grand Juries, have strongly urged a more complete system of examination for licenses, and a wider range of instruction in handling a motor.

I am of the opinion that a signed application should be in all cases required from each applicant for a driver's license, with due provision for forfeiture for mis-statements therein.

This should require information about age, physical condition, past experience, and driving record, stating any convictions for offences under Traffic Acts, and judgments involving negligence in motor accidents, and a statement showing when, and where, and by whom, the applicant was examined, and date of certificate of fitness; also particulars of insurance carried.

No properly drawn Safety Responsibility Law requiring insurance should be passed without a provision requiring a signed application for insurance to be made by the would-be driver or owner, which should contain all that would enable the insurance company to determine the acceptance of the risk, which should include the age, experience in driving, and freedom from accident, of the applicant. This application should, as practised now in automobile casualty insurance, form part of the policy, and should be copied into the same. This will enable the Commissioner of Motor Vehicles, when issuing the license, to compare the statements in the application with his office record as to the freedom from accident and the age and the experience of the applicant.

I do not make any recommendations as to the examination of cars, owing to the manifest impossibility of examining all our own and other cars, foreign, and from adjoining Provinces. But it might well be considered, in determining to issue a vehicle license, whether information should not be required as to the price paid for the car by

the applicant, and when manufactured, and if the price, or other circumstances, suggest a ramshackle vehicle, a special test might be made as to its mechanical condition.

In Toronto our energetic Chief Constable has indicated that during the present year plans will be formulated and put into operation to enable more thorough examination and tests to be applied to motor vehicles, not only as to brakes, but as to horn, lights, steering gear, and mufflers — in short, road worthiness will be the test. Special attention might well be paid to dazzling headlights.

I do not enter into the question of the speed limit, except to say that in the case of motor trucks, buses, and similar motor vehicles, there ought to be, especially in the cities, towns, and villages, some definite restraint on the speed at which these vehicles are usually propelled, with severe penalties if the prescribed limit is exceeded. When it is considered that a car going at thirty miles an hour, usually considered a moderate speed, striking a one-ton obstruction, can throw it thirty feet into the air, it is not too much to say that no speed is reasonable which prevents the operator from avoiding an accident. In England a brief telegraphic despatch reports that the House of Commons has passed an Act abolishing the speed limit — with severe penalty for recklessness. If so, that is contrary to the vote of the Borough Council's Conference in favour of retaining the speed limit in inner and outer London.

With regard to an age limit the evidence taken before the Royal Commission on Transport in England, in their first report, the latter suggests this being raised for motor cycles, from fourteen to sixteen years, and leaves the age for other motor vehicles at seventeen.

I think the evidence before me of Inspector McKinney, of the Toronto Police Force, reflects the conclusion of a great many people, that it would be a great advantage to raise the age limit to eighteen, and to insist on very stringent examinations for drivers of all kinds of motor trucks and commercial vehicles, including buses. The boys that drive many, if not most of these trucks, and also light delivery motors, such as deliver the evening papers, etc., are a constant danger from their youthful irresponsibility, and very often callous disregard of others. I think it is safe to say that most of these heavy and cumbersome vehicles with irresponsible drivers, and travelling at their usual rapid rate, secure from damage in their bulk and strength, form a great menace on the streets of a city, and on the highways.

The owners of buses, taxis, and such like vehicles should require to pass a suitable strict examination, owing to the number of persons whom they have under their care.

The reason given by Inspector McKinney was that the existence of this young and poorly paid class of motor truck drivers, if allowed to continue, would do much to defeat all efforts to secure safety, which, after all, is the great and controlling duty of both the State and the individual motorist. Inspector McKinney's evidence on this point, dealing also with the remedy, is as follows:—

“It is the young man who thinks he can do the impossible who generally causes accidents. He thinks he can get through between a street car and a parked car before the street car gets

to him, and consequently he is caught by the street car. He thinks he can go driving at a high rate of speed and cut in ahead of another man driving at a fairly good rate of speed and not get into trouble, and the consequence is that he gets caught by the man behind him, or runs into the man in front of him.

“Truck drivers, unfortunately, come in for a great deal of trouble. The truck driver is a low paid man, and as a rule he is a man who does not qualify for anything except labouring work. It is a hard job, and I am sorry to say that there are a number of very irresponsible people driving trucks. They have nothing to lose. If they strike a car or anything on the road they have nothing to lose except a day’s pay, or a week’s pay, if it is coming to them.”

“Q. If a truck driver is guilty of an accident and his license is suspended, the owner of the truck could employ some other man of much the same calibre?”

“A. He cannot get anybody else.”

“Q. Therefore that risk would be run all the time?”

“A. I do not know any way you can get by that, because there is only a certain class of man who will drive a truck, for it is hard and dangerous work, and work for which there is very small remuneration.”

“Q. If you suspend the license of a vehicle after one or two convictions of drivers, would not that compel the truck owner to get a better class of man?”

“A. It might, if he could get a better class.”

“Q. Supposing he cannot, do you mean to say that an incompetent driver should be allowed to operate a car on the road, and no attempt be made to force a better class of man into that position?”

“A. As soon as a man is found incompetent he should not be allowed to drive.”

“Q. I am putting to you the case of a truck driver who has been convicted and license suspended. The truck owner employs a man of the same kind, and he is suspended in the same way. Would not the suspension of the truck license, under some circumstances, lead that employer to secure a better class of man to drive his trucks?”

“A. It would, but I would not like to see the truck prohibited from running on the road for as long a term as the driver.”

(7) *Classification of Drivers:*

This is a most important safety feature of a financial security law, though it is not an indispensable part of it, but it has the approval of many as a financial inducement to safety.

The Connecticut Plan of Classification possesses the merit of making it difficult for reckless and drunken drivers and those against whom a conviction stands, who have persisted in disregarding the safety provisions of the Highway Traffic Act, to obtain the security

demanded by the Act, and so is gradually eliminating these undesirable individuals. This will also be one of the results of the English Compulsory Law, though not through any system of classification, because their Insurance Companies there are able (and are not going to be interfered with by the Government, as was stated in the House of Lords) to refuse insurance to those whose records indicate that they are more than usually hazardous risks, a power which the Insurance Companies say they will not hesitate to use. My conclusion, while strongly in favour of this system is that, to be fair and reasonable, it must rest upon sufficient evidence as to fault, both over a sufficient period of time, and must also properly discriminate as to the extent of the injury and the blameworthiness of the individual.

Under the powers given by the Connecticut law, where an accident happens of any nature, causing personal injury, the operator falls at once into one of three classes — A, B, and C,— A. being reserved for the less serious accidents, B. for more serious accidents, and C. for major offence against the Traffic Act, and those convicted of recklessness in driving, or driving when under the influence of liquor or drugs.

The effect of this is that, as the law requires insurance to be taken out on the happening of any injury or damage caused by a motor, the Insurance Company at once inquires as to the applicant's classification. His application for insurance naturally reveals the fact that in most cases he has caused injury or damage, and is therefore compelled to get insurance. If he should have been put in Class B, he requires to pay an extra 25% of the normal premium; if in Class C. 50% extra. The insurance Companies are not bound to give insurance to any applicant, but if they do the careless or dangerous driver with a bad record, has to pay a substantial extra amount. Those in Class C, who are there, either because they are reckless or drunken drivers, may find that they cannot get insurance, notwithstanding the heavy premium, because the Companies think the risk too dangerous. This has the direct effect of keeping off the roads those who do not deserve to have the right to use them. As it was put before me: "It is going to cost the man who has an accident, money to get financial responsibility rating, and increasingly, as he has to pay according to the risk". There are apparently no protests in Connecticut against this Classification Law.

Mr Edward J. Bond, Jr., who is Vice-President of the Maryland Casualty Company, says, in reference to the classification plan:

"I am a believer that that plan is a good experiment, and should be tried, and I favour that, not so much from a rate standpoint, as because I believe that it might open a way to deal with the irresponsible automobile driver who never should be allowed to drive a car anyway, under any circumstances, and at any premium rate. I think it more useful for safety than from a rate standpoint."

Earl Russell, in giving evidence before the Royal Commission on Transport in England, dealt with this phase of the subject in this way:—

"The point has been made that, if anybody could obtain a license if he had taken out a third party risk insurance

policy, the Insurance Companies would, in some cases, become in fact, the licensing authorities, since they could refuse to insure certain persons at any premium."

This, Lord Russell admitted to be true, but suggested that if the record of some drivers is so bad that no Company would insure them, it would be a public advantage if they were kept off the road.

But in England it is, I think, evident from the evidence given, that Companies will be obliged in some way to classify the risk which they are compelled to undertake. Mr. Robert McConnell, representing the Accident Offices Association — he being the London manager of the Royal Insurance Company — pointed out that selection of risks being the first principle, in any underwriting, they would have to consider their duty with regard to compulsory insurance, and would have to devise some method of improving it, and possibly have to see and adopt assessments and methods that would be quite unsound from the standpoint of ordinary underwriting methods, remarking that the premiums having regard to the cost of claims were very near the border line now, and they would undoubtedly have to go up, and that the making of unfounded claims, which he anticipated would increase, would enlarge the claims cost.

Mr. Austin J. Lilly, in speaking of the Connecticut plan, gave it as his opinion that "the driver who was judicially subject to a penalty of that sort tends to have it in mind, not so much that it may cost him \$2.00 or \$3.00, a year, but that it puts him in a class in which he would prefer not to be." He thought that the effect on the average motorist would be that there would be a record against him, and that that would influence him to avoid in every possible way, incurring that record.

I would strongly recommend the adoption, at the present time, of this system of classification in connection with a Financial Responsibility Law, were it not for the fact that to do so, in the absence of a system of obtaining correct and systematic records of drivers over a reasonable period of time would be unfair, in view of the consequences.

I have in this report, given an outline of the system adopted in Connecticut so that it may be appreciated that the obtaining and keeping correct and definite records needs the expenditure of a considerable amount of money in preparing and perfecting a proper organization to deal with the obtaining and classifying of such records, and until that is set up it would be useless to provide for the classification I have mentioned. It would not be reasonable, even when the system is adopted, to attempt to classify until a sufficient time has elapsed to obtain practical results.

But I think that the law which I submit herewith should provide for a proper system of reporting, collating, and analyzing accidents, their cause and effects, and that, say within a year or more from the enactment of such a provision, the Lieutenant-Governor in Council should make regulations on the report of the Minister of Highways, for classifying owners and drivers on the basis of the records so kept, and to fix the various additional penalties or increases in premium rates to be paid by those so classified.

These matters must be considered and dealt with systematically and carefully. To do this requires the setting up of a sufficient staff and proper equipment, and this entails an increased appropriation. Even if that were secured no record could be properly established for it least a year, or probably two years.

I have, therefore, come to the conclusion that, while I regard the provisions for classifying, as found in the Connecticut Statute, essential to a complete rounding out of a scheme of Safety Responsibility Insurance, such as I recommend, the provisions for its insertion in legislation in this Province should be as set forth in the Draft Bill, and that it should come into force within a time to be determined by the Minister of Highways.

(8) *Appointment and Duties of Registrar of Motor Vehicles.*

I was much impressed with the growing responsibilities of Registrars or Commissioners of Motor Vehicles, as appointed, in the eastern States of the Union. Not more than a decade ago these officials were primarily revenue officers — collectors of motor vehicle permit fees; to-day they are administrative heads of departments of the Government, charged with the enforcement of all motor vehicle and traffic laws, around whom centre all Government activities designed to make the highways safe — to save the life and limb and property of our citizens.

The administration of Commissioner of Motor Vehicles Stoeckel, of Connecticut, covering the period of the last thirteen years, is an outstanding example of what a qualified Motor Vehicle Commissioner, enthusiastic over the possibilities of his work, and given the powers and money necessary to its accomplishment, can do in solving the growing problem of traffic control and highway safety.

It would appear that the present Registrar in Ontario is well qualified by his experience, and otherwise, to assume greater responsibilities. I venture to suggest that he should, acting under the instructions of the Minister of Highways, be given increased powers, such as are necessary or advisable to administer the new Act, if passed properly, and that he should be expected to assume direct responsibility to the Minister of Highways for the enforcement of the Provincial motor vehicle and traffic laws, and the development of new measures and plans to improve motor conditions in the Province. In any event, I think the provisions incorporated in the Draft Bill, respecting the appointment and duties of the Registrar, are almost necessary consequences to the enactment of what is now proposed, and I recommend their adoption.

(9) *A Proper Reporting System.*

The matter of reporting accidents, with the names of the parties, and particulars of the injuries, to the Commissioner of Motor Vehicles, is of the greatest importance.

The first report of the Royal Commission on Transport in England, shows that there were no comprehensive official statistics in existence, dealing with the causation of automobile accidents. The Report was therefore based on imperfect information, and it urges that full enquiry should be made by the Minister of Transport, and the results embodied in periodical returns. From the data which was before them the Commission reports that 39.1% appear to be due to the motor driver (of which 15.1% was caused by excessive speed), while 43.2% is attributable to pedestrians and others than the driver, 4.2% to weather conditions, 6.2% to road defects, and 7% to defective vehicles.

In Connecticut a master file is kept which shows each operator's license, and enables the disciplinary power of classification to proceed by way of eliminating drunken and reckless drivers from the high-ways of the State.

The records extend over twelve years, and are complete, dealing as they do with every accident over \$25. damage, and of Court convictions for motor vehicle offences. The information is gathered in this way: There is a press clipping bureau which every day clips from the newspapers information and news about accidents in the State, and "it is a pretty poor accident that does not get into some paper". In that news item there will be certain essential facts, including the names of the people involved. If the accident is a collision of two or three cars, the parties in the accident are given three weeks to make their report. Failure to do so results in the loss of their licenses. The result of this is that they do pay attention to the law, and the Bureau gets full reports. The Court records are sent in from the different courts on a blank form provided by the Motor Vehicles Department, and payment of \$3.00 is allowed for each report, and charged as costs in the case, to be paid by the person who is convicted.

The Department works in close co-operation with the Police Department, and that of Public Works, and secures in that way information, as these Departments both report back to the Motor Vehicles Department. This comprehensive plan of securing information is, of course, expensive, and for its carrying out would require more than is at present allotted to that Department in Ontario.

The importance of collecting records cannot be over-estimated, and if they are properly kept a great step towards safety can be made. The Connecticut Bureau have maps of the whole State, and on the occurrence of any accident the exact point at which it occurred is marked on the map by a coloured pin, the colour differing in such a way as to indicate the seriousness of the accident. By this method accidents in every city in the State, and on the county roads, are marked, and a full history of the accidents is got which enables the Department to advise as to what is the matter with the location where the accident occurred, and if any particular spot or corner has had five accidents the matter is taken up with the State or County authorities with

a view to improvement. The Bureau in Connecticut has authority, after these enquiries are made, to undertake the necessary work to make the spot or corner safe, but it has not yet had to use that power, owing to the interest taken by the County and State authorities and their engineers, in the subject, resulting in improvements being undertaken by the proper authorities.

I may add the recommendation of the California Committee, issued last year, which insists on the importance of, and recommends:

“Compulsion, and adequate uniform methods, of accident reporting; collection and analysis of accident and traffic statistics; study of accident causes and trends, and of traffic problems and regulations. In short, acquisition of the knowledge that must be the basis of intelligent regulation.”

It enforces its recommendation by pointing out that:

“The Committee has been influenced in the recommendation it makes on this subject by many considerations. It has been much impressed by the enlightening results of similar studies made for a number of years in the State of Connecticut, by comparative tables contained in the reports of the Maryland Commissioner of Motor Vehicles, and by the highly useful publications of such organizations as the National Safety Council, some of the larger Life Insurance Companies, and the American Road Builders’ Association.

“The measure which this Committee proposes has been urgently recommended by the National Conference on Street and Highway Safety (the Hoover Conference), the Chamber of Commerce of the United States, the American Automobile Association, and the American Motorists’ Associations, and local sentiment is no less favorable.”

(10) *Proposed Legislation:*

I have prepared, with the assistance of Mr. R. Leighton Foster, the Superintendent of Insurance in Ontario, and Counsel acting for the Commission, a Bill to amend the Highway Traffic Act, containing what I believe to be, from the standpoint of both safety and security, the most appropriate for conditions in Ontario, comprising as it does, the most carefully worked out provisions, following the general lines of the A.A.A. Bill, and adopting many provisions to be found in legislation, both in England and in the various States of the Union, all of which have been most carefully studied, and the details and the working of which have been tested as carefully as possible by the examination of the witnesses called, both here and elsewhere.

I wish to express my gratitude and indebtedness to Mr. Foster for his willing and expert help.

The Bill will be found appended to this Report as Appendix “A”.

The Amendments recommended to the Insurance Act are set out as Appendix “B”.

X. ACKNOWLEDGMENTS

In closing this Report I desire to express my indebtedness, in dealing with the subject of Compulsary Insurance or the Safety Responsibility Plan, to Mr. R. Leighton Foster and Mr. V. Evan Gray, both of whom were most helpful in not only examining the witnesses, but in arranging for their presence, which, but for their assiduity, would have been hard to arrange.

To all those who came forward and gave me the benefit of their views, arguments, and experience, in relation to this subject, I wish to pay my tribute of appreciation for their interesting and useful evidence, and the willingness with which they placed every possible facility at my service.

All of which is respectfully submitted.

FRANK E. HODGINS,

Osgoode Hall, Toronto,
March 3rd, 1930

Commissioner.

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APPENDIX "A"

DRAFT BILL

AN ACT TO AMEND THE HIGHWAY TRAFFIC ACT

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BILL

An Act to amend The Highway Traffic Act.

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

Short title.

1. This Act may be cited as *The Highway Traffic Amendment Act, 1930*.

R.S.O. 1927,
c. 251, s. 1,
amended.

2. Section 1 of the Highway Traffic Act is amended by adding thereto the following clause:

Registrar.

(c) "Registrar" shall mean the Registrar of Motor Vehicles appointed under the authority of this Act.

R.S.O. 1927,
c. 251,
amended.

3. The Highway Traffic Act is amended by adding thereto the following as Section 1-a:

Registrar of
Motor Vehicles.

1a.—(1) There shall continue to be a Registrar of Motor Vehicles who shall be appointed by the Lieutenant-Governor in Council.

Duties.

(2) The Registrar shall act under the instructions of the Minister and shall have general supervision over all matters relating to highway traffic within Ontario, and shall perform such duties as are assigned to him by this Act, by the Lieutenant-Governor in Council, or by the Minister.

Minister may
delegate powers
to Registrar.

(3) The Minister may delegate to the Registrar, during his absence or inability, or otherwise, any authority or duty given or imposed upon him by this Act.

4. The Highway Traffic Act is amended by adding thereto the following Part:—

PART III-A.

FINANCIAL RESPONSIBILITY OF OWNERS AND DRIVERS:

20a. In this Part:—

Definitions.

(a) "Authorized Insurer" means an insurer duly licensed under the provisions of the Insurance Act (Cap. 222, R.S.O. 1927) to carry on in Ontario the business of automobile insurance.

(b) "Driver's License" means and includes an operator's license issued pursuant to the provisions of Part XII. of this Act, and a chauffeur's license issued pursuant to Part III. of this Act.

(c) "Motor Vehicle" includes "Trailer," as defined in this Act.

(d) "Owner's Permit" means a permit issued pursuant to the provisions of Part I. of this Act.

(e) "Person" includes individual, partnership, corporation, association, liquidator, receiver, custodian in Bankruptcy, Trustee in Bankruptcy, referee, trustee, executor, and administrator.

(f) "Proof of Financial Responsibility" means a certificate of insurance, a bond, or a deposit of money or securities, given or made pursuant to Section 20-*i* of this Part.

(g) "Treasurer" means the Treasurer of Ontario.

(h) "State" means one of the United States of America.

(i) "Superintendent of Insurance" means the Superintendent of Insurance appointed under the authority of the Insurance Act.

General applica-
tion.

20b.—(1) Nothing in this Part shall impair the authority of the Minister, a Police Magistrate, or Justice of the Peace, to cancel or suspend a driver's license or owner's permit, as elsewhere provided in this Act, and nothing herein shall prevent the plaintiff in any action from proceeding upon any other remedy or security available at law.

(2) This Part shall only apply to offences and violations of law committed, and to convictions and judgments arising out of motor vehicle accidents occurring, and to motor vehicle liability policies issued, after the date of coming into force of this Part.

Licenses sus-
pended for con-
victions.

20c.—(1) The driver's license and/or owner's permit or permits if any, of every person who shall, by any order or judgment of any Court in Ontario, have been convicted, of any one of the following offences or violations of law, or who, having been arrested for any such offence or violation, has forfeited his bail, viz.:—

Reckless driving.

(a) Any offence for which a penalty is provided in Section 24 of this Act.

Racing.

(b) Any offence for which a penalty is provided in Section 25 of this Act.

Speeding.

(c) Exceeding the speed limit fixed by Section 23 of this Act, if any injury to any person or property occurs in connection therewith.

Passing street
cars.

(d) Any offence for which a penalty is provided in Section 37 of this Act.

Leaving scene of
accident.

(e) An accident having occurred, failing to remain at or return to the scene of the accident in violation of the provisions of Section 40 of this Act.

Driving without
a License.

(f) Operating or driving a motor vehicle on a highway without a driver's license required by this Act.

Criminal offence.

(g) Any criminal offence involving the use of a motor vehicle.

Other offences.

(h) Such other offences against public safety on highways as may from time to time be designated by the Lieutenant-Governor in Council.

shall be forthwith suspended by the Registrar, and shall remain so suspended, and shall not, at any time thereafter, be renewed, nor shall any new driver's license, or owner's permit, be thereafter issued to such person until he shall have given to the Registrar proof of his financial responsibility for legal liability arising out of future motor vehicle accidents, in the amount and manner required by this Part.

Conviction in
other Provinces
or States.

(2) Upon receipt by the Registrar of official notice that the holder of a driver's license, or owner's permit under this Act, has been convicted, or forfeited his bail, in any other Province or State in respect of an offence, which, if committed in Ontario would have been, in substance and effect, an offence under, or a violation of the provisions of law mentioned in the next preceding sub-section of this Section, the

Registrar shall suspend every driver's license and/or owner's permit or permits, if any, of such person issued pursuant to this Act, until that person shall have given proof of financial responsibility in the same manner as if the said conviction had been recorded by a Court in Ontario.

Non-residents.

(3) If any person to whom sub-section (1) applies, is not a resident of Ontario, the privilege of operating any motor vehicle within Ontario, and of operation within Ontario of any motor vehicle owned by him, shall be, and is suspended and withdrawn forthwith, by virtue of such conviction or forfeiture of bail, until he has complied with the provisions of sub-section (1).

License suspended for failure to pay judgments.

20d.—(1) The driver's license and/or owner's permit or permits, if any, of every person who fails to satisfy a judgment rendered against him, by any Court in Ontario, or in any other Province of Canada, which has become final by affirmation on appeal or by expiry, without appeal, of the time allowed for appeal, for damages on account of injury to, or death of any person, or damage to property in excess of \$100, hereafter occasioned by a motor vehicle, within fifteen days from the date upon which such judgment became final, shall be forthwith suspended by the Registrar, upon receiving a certificate of such final judgment from the Court in which the same is rendered, and shall remain so suspended, and shall not any time thereafter be renewed, nor shall any new driver's license or owner's permit be thereafter issued to such person until said judgment is satisfied or discharged (otherwise than by a discharge in Bankruptcy) to the extent of at least \$5,000 (exclusive of interest and costs) for injury to, or death of, any one person, and, subject to that limit for each person so injured or killed, to the extent of at least \$10,000, (exclusive of interest and costs), for injury to, or death of, two or more persons in one accident, and to the extent of at least \$1,000 (exclusive of interest and costs), for damages to property in any one accident, and until the said person gives proof of his financial responsibility for legal liability arising out of future motor vehicle accidents, in the amount and manner required by this Part.

Subsequent judgments.

(2) If, after such proof of financial responsibility has been given, any other judgment against such person, for any accident occurring before such proof was furnished, and after the coming into force of this Act, shall be recorded and duly reported to the Registrar, every driver's license and owner's permit of such person shall again be, and remain, suspended until such judgment is satisfied and discharged (otherwise than by a discharge in Bankruptcy) to the extent described in the next preceding sub-section.

Non-residents.

(3) If any person to whom subsection (1) hereof applies is not resident in Ontario, the privilege of operating any motor vehicle in Ontario, and the privilege of operation in Ontario of any motor vehicle registered in his name, shall be, and is, suspended and withdrawn forthwith by virtue of such judgment until he has complied with the provisions of subsection (1).

Persons under and over certain ages.

20e. The Registrar may require proof of financial responsibility from the applicant before issue of an owner's permit or driver's license, or the renewal thereof to any person under the age of twenty-one years or over the age of sixty-five years.

Persons responsible for accidents.

20f. The Registrar may require proof of financial responsibility from any person who, while operating any motor vehicle, shall have been involved in, and, in the opinion of the Registrar, is responsible in whole or in part, for any motor vehicle accident resulting in the death of, or injury to, any person, or damage to property in excess of \$100, or from the person in whose name such motor vehicle is registered, or from both, and the Registrar may suspend all owner's permits and drivers' licenses in such cases until such proof of financial responsibility has been given.

Voluntary filing of financial responsibility.

20g.—(1) An owner's permit and driver's license, or, in the case of a person not resident in Ontario, the privilege of operating any motor vehicle in Ontario, and the privilege of operation within Ontario of any motor vehicle owned by such non-resident, shall not be suspended or withdrawn under the provisions of this Part, if such owner, driver, or non-resident has voluntarily filed or deposited with the Registrar, prior to the offence or accident, out of which any conviction, judgment, or order arises, proof of financial responsibility, as herein defined, which, at the date of such conviction, judgment, or order, is valid and sufficient for the requirements of this Part.

Registrar may receive proof.

(2) The Registrar shall receive and record proof of financial responsibility voluntarily offered by any person mentioned in subsection 1, hereof.

Amounts and limits.

20h. Proof of financial responsibility shall be given in the following amounts by every driver, and, in the case of an owner, in the said amounts for each motor vehicle registered in his name, by every owner, to whom this Part applies, namely:—

(a) For damages by reason of personal injury to, or death of, any one person, at least \$5,000 (exclusive of interest and costs), and, subject to the aforesaid limit for each person injured or killed, at least \$10,000 (exclusive of interest and costs), for such injury to, or the death of, two or more persons in any one accident; and

(b) For damage to property resulting from any one accident, at least \$1,000 (exclusive of interest and costs).

Proof of financial insurance.

20i.—(1) Proof of financial responsibility may be given in any one of the alternative forms hereinafter described, namely:—

Certificates of insurance.

(a) The written certificate or certificates, filed with the Registrar, of any authorized insurer that it has issued, to or for the benefit of the person named therein, a motor vehicle liability policy or policies, in form hereinafter prescribed, which, at the date of the certificate or certificates, is in full force and effect, and which designates therein, by explicit description, or by other adequate reference, all motor vehicles to which the policy applies.

Any such certificate or certificates shall cover all motor vehicles then registered in the name of the person furnishing such proof. Additional certificate shall be required as a condition precedent to the registration of any additional motor vehicle or motor vehicles in the name of such person required to furnish proof as aforesaid. The said certificates, or certificate, shall certify that the motor vehicle liability policy or policies therein mentioned shall not be cancelled or expire, except upon ten days prior written notice thereof to the Registrar, and until such notice is duly given the said certificate or certificates shall be valid, and sufficient to cover the term of any renewal of such motor vehicle liability policy by the insurer, or any renewal or extension of the term of such driver's license or owner's permit by the Registrar.

Surety bond.

(b) The board of a guarantee insurance or surety company, duly licensed in Ontario, pursuant to the Insurance Act, or a bond of personal sureties, approved as adequate security hereunder, upon application to a Judge of a County or District Court of the County or District in which such sureties reside.

The said bond shall be in form approved by the Registrar and shall be conditioned for the payment of the amounts specified in this Part, and shall not be cancelled or expire except after ten days' written notice to the Registrar, but not after the happening of the injury or damage secured by their bond as to such accident, injury, or damage, and the said bond shall be filed with the Registrar; or

Money or securities.

(c) The certificate of the Treasurer that the person named therein has deposited with the Treasurer a sum of money or securities for money approved by him in the amount of value of \$11,000 for each motor vehicle registered in the name of such person. The Treasurer shall accept any such deposits and issue a certificate therefor, if such deposit is accompanied by evidence that there are no unsatisfied executions against the depositor registered in the office of the Sheriff for the City, County, or District in which the depositor resides.

Registrar may require additional proof.

(2) The Registrar may, in his discretion, at any time, require additional proof of financial responsibility, to that filed or deposited by any driver or owner pursuant to this Part, and may suspend the driver's license and/or owner's permit, or permits, if any, pending such additional proof.

Proof of financial responsibility by non-residents.

(3) Where a person, who is not a resident of Ontario, is required to give, or volunteers, proof of financial responsibility under this Part, the Registrar may accept as such proof such certificate of an authorized insurer relating to a motor vehicle liability policy issued outside of Ontario, insuring such person against loss from the liability imposed by law, arising out of motor vehicle accidents occurring within Ontario as he may deem proper; and may issue to such person an official non-resident insurance identification card; and may provide for the giving or volunteering of such proof to, and the issue of such cards by, his representatives at selected points along the provincial border.

Application of security.

20j.—(1) The bond, money, or securities, lodged with the Registrar or Treasurer, as the case may be, pursuant to the foregoing section, shall be held by him in accordance with the provisions of this Part, as security for any judgment against the owner or driver making the deposit, in any action arising out of damage caused after such deposit, by the operation of any motor vehicle owned or operated by such owner or driver, or by any other person for whose negligence the owner or driver shall be liable. Money and securities so deposited with the Treasurer shall not be subject to any claim or demand, except an execution on a judgment for damages, for personal injuries, or death, or injury to property, occurring after such deposit, as a result, in the case of an owner of a motor vehicle, of the operation of the motor vehicle for which the security was given, and, in the case of a driver, of the operation of any motor vehicle operated by him, or by any other person for whose negligence such driver shall be liable.

Action on security.

(2) If a judgment to which this Part applies is rendered against the principal named in the bond filed with the Registrar, and such judgment is not satisfied within fifteen days after it has been rendered, the judgment creditor may, for his own use and benefit, and at his sole expense, bring an action on said bond in the name of the Treasurer, against the persons executing such bond.

Chauffeurs or members of owner's family.

20k. If the Registrar shall find that any driver to whom this Part applies, was, at the time of the offence for which he was convicted, employed by the owner of the motor vehicle involved therein as chauffeur, or motor vehicle operator, whether or not so designated, or was a member of the same family or household of the owner of such motor vehicle, and that there was no motor vehicle registered in Ontario in the name of such driver as an owner, either at the time of the offence or subsequent thereto, then, if the owner of such motor vehicle submits to the Registrar (who is hereby authorized to accept it) proof of his financial responsibility, as provided by this Part, such chauffeur, operator, or other person, shall be relieved of the requirement of giving proof of financial responsibility on his own behalf.

Payment of judgment in instalments.

20l. A judgment debtor to whom this Part applies may, on due notice to the judgment creditor, apply to the Court in which the trial judgment was obtained, for the privilege of paying such judgment in instalments, and the Court may, in its discretion, so order fixing the amounts and times of payment of such instalments. While the

judgment debtor is not in default in payment of such instalments, he shall be deemed not in default for the purposes of this Part in payment of the judgment, and upon proof of financial responsibility for future accidents pursuant to this Part, the Registrar may restore the driver's license and owner's permits of such judgment debtor, but such driver's license and owner's permits shall again be suspended and remain suspended, as provided in Section 20*d* hereof, if the Registrar is satisfied of default made by the judgment debtor, in compliance with the terms of the Court order.

Report of convictions, etc., to Registrar.

20*m*.—(1) It shall be the duty of the Clerk or Registrar of the Court (or of the Court where there is no Clerk or Registrar) in which any final order, judgment, or conviction to which this Part applies, is rendered, to forward to the Registrar of Motor Vehicles, immediately after the date upon which the order, judgment, or conviction becomes final by affirmation upon appeal or by expiry, without appeal, of the time allowed for appeal, a certified copy of such order, judgment, or conviction, or a certificate thereof, in form prescribed by the Registrar of Motor Vehicles. Any such copy, transcript, or certificate, shall be prima facie evidence of such order, judgment, or conviction. The Clerk, or other official charged with this duty of reporting to the Registrar of Motor Vehicles, shall be entitled to collect and receive a fee of \$1.00 for each certificate, record, or report hereby required, which fee shall be paid as part of the Court costs, in case of a conviction, by the person convicted, and, in case of an order or judgment by the person for whose benefit judgment is issued.

Notification in case of non-residents.

(2) If the defendant is not resident in Ontario it shall be the duty of the Registrar of Motor Vehicles to transmit to the Registrar of Motor Vehicles, or other office or officers, if any, in charge of the registration of motor vehicles, and the licensing of operators in the Province or State in which the defendant resides, a certificate of the said order, judgment, or conviction.

Abstract of operating record.

20*n*.—(1) The Registrar shall, upon request, furnish to any insurer, surety or other person, a certified abstract of the operating record of any person, subject to the provisions of this Part, which abstract shall fully designate the motor vehicles, if any, registered in the name of such person, and the record of any conviction of such person for a violation of any provision of any Statute relating to the operation of motor vehicles, or any judgment against such person for any injury or damage caused by such person, according to the records of the Registrar, and if there is no record of any such conviction, violation, judgment, injury or damage, in the office of the Registrar, the Registrar shall so certify. The Registrar shall collect as a fee for each such certificate, the sum of \$1.00.

Particulars of security to be furnished.

(2) The Registrar shall furnish any person who may have been injured in person or property by any motor vehicle, upon written request, with all information of record in his office pertaining to the proof of financial responsibility of any owner or driver of any motor vehicle furnished pursuant to this Part.

Return of permit and plates when license suspended.

20*o*. Any owner or driver whose permit or license has been suspended, as herein provided, or whose policy of insurance or surety bond, shall have been cancelled or terminated as herein provided, or who neglects to furnish additional proof of financial responsibility upon the request of the Registrar, as herein provided, shall immediately return to the Registrar his driver's license, his motor vehicle permit or permits, and all license plates issued thereunder. If any such person fails to return his license permits and plates as provided herein, the Registrar may direct any police officer to secure possession thereof and return the same to the office of the Registrar. Any person failing to return his license permits and plates when so required, or refusing to deliver the same when requested to do so by the police officer, shall be guilty of an offence and incur a penalty of not less than \$10.00, and not more than \$100 for each offence.

Transfer of suspended permit.

20*b*. If an owner's permit has been suspended under the provisions of this Part, such permit shall not be transferred nor the motor vehicle in respect of which such permit was issued, registered in any other name until the Registrar is satisfied that such transfer or registration is proposed in good faith and not for the purpose, or with the effect, of defeating the purposes of this Part.

Cancellation and return of security.

20*q*.—(1) The Registrar may cancel any bond or return any certificate of insurance, or the Treasurer may, at the request of the Registrar, return any money or securities deposited pursuant to this Part, as proof of financial responsibility, at any time after three years from the date of the original deposit thereof, provided that the owner or driver on whose behalf such proof was given has not, during the said period, or any three year period immediately preceding the request, been convicted of any offence mentioned in Section 20*c* hereof, and provided that no action for damages is pending and no judgment is outstanding and unsatisfied in respect of personal injury or damage to property in excess of \$100.00, resulting from the operation of a motor vehicle. A statutory declaration of the applicant under this Section shall be sufficient evidence of the facts in the absence of evidence to the contrary in the records of the Registrar.

Substitution of security.

(2) The Registrar may direct the return of any bond, money, or securities, to the person who furnished the same, upon the acceptance and substitution of other adequate proof of financial responsibility, pursuant to this Part.

Return of security when motor vehicle is sold.

(3) The Registrar may direct the return of any bond, money, or securities deposited under this Part to the person who furnished the same at any time after three years from the date of the expiration or surrender of the last owner's permit or driver's license issued to such person under this Act, if no written notice has been received by the Registrar within such period of any action brought against such person in respect of the ownership, maintenance, or operation of a motor vehicle, and upon the filing by such person with the Registrar, of a statutory declaration that such person no longer resides in Ontario, or that such person had made a bona fide sale of any and all motor vehicles owned by him, naming the purchaser thereof, and that he does not intend to own or operate any motor vehicle in Ontario within a period of one or more years.

Penalty for false certificate.

20*r*. Any person who, falsely, or without authority, signs or certifies any proof of financial responsibility required under this Part, shall be guilty of an offence, and shall incur a penalty of not less than \$100.00, or imprisonment for not more than thirty days, or both, for each offence.

Coverage of Motor Vehicle Liability Policy.

20*s*. Every motor vehicle liability policy shall contain the name of the person or persons insured thereby, and shall designate by explicit description, or other adequate reference, all motor vehicles with respect to which insurance is intended to be granted by such policy, and the policy shall insure:—

Owner's Policy.

(*a*) The person named therein and any other person or persons using, or responsible for the use of, any such motor vehicle with the consent, express or implied, of such insured, against loss from the liability imposed by law (except liability imposed under any Workmen's Compensation Law) upon such insured, or upon such other person or persons for injury to, or death of, any person; or damage to property (except property of others in charge of the insured or the insured's employees), arising from the ownership, maintenance, use, or operation of any such motor vehicle within Canada or the United States of America; or,

Driver's Policy.

(*b*) The person therein named as insured against loss from the liability imposed by law (except liability imposed under any Workmen's Compensation Law), upon such insured for injury to, or death of, any person (other than such person or persons as may be covered in respect of such injury or death by any Workmen's

Compensation Law) or damage to property (except property of others in charge of the insured or the insured's employees) arising from the operation or use by such insured of any motor vehicle (except a motor vehicle registered in the name of such insured) and occurring while such insured is personally in control as driver or occupant of such motor vehicle within Canada or the United States of America;

Limits. In either case, to the amount or limit of at least \$5,000.00 (exclusive of interest and costs), for injury to, or death of, any one person, and, subject to that limit for each person so killed or injured, of at least \$10,000.00 (exclusive of interest and costs) for injury to, or death of, two or more persons in any one accident, and, of at least \$1,000.00 (exclusive of interest and costs), for damages to property of others, as herein provided, resulting from any one accident.

Excess coverage. (2) Neither the form of certificate of insurance, nor anything herein contained, shall prevent the issue of a policy granting any lawful insurance in excess of, or in addition to, the coverage herein provided for, nor from embodying in such policy any agreements, provisions, or stipulations not contrary to law.

Policy form to be approved. (3) No motor vehicle liability policy shall be issued or delivered in Ontario until a copy of the form of policy shall have been on file with the Superintendent of Insurance for at least thirty days, unless sooner approved in writing by him, nor if within said period of thirty days he shall have notified the insurer in writing that, in his opinion, specifying the reasons therefor, the form of policy does not comply with the law of Ontario.

Provisions to which policy is subject. (4) Every motor vehicle liability policy shall be subject to the following provisions, whether or not such provisions are contained therein, and notwithstanding any law or statute or provision of such policy to the contrary:

Rights of third parties against insurer. (a) A judgment creditor or judgment creditors with unsatisfied judgments arising out of, or based upon a claim or claims against the insured, for which indemnity is provided by a motor vehicle liability policy, shall be entitled to have the insurance moneys payable under such policy applied in or towards satisfaction of such judgment or judgments, and may, on behalf of themselves and all other persons having similar judgments or claims against the insured, maintain an action against the insurer to have such insurance moneys so applied; provided that, if the insured is entitled to indemnity under any other motor vehicle liability policy in respect of such judgments or claims, the insurer may require such other insurer or insurers to be made parties to any such action and to contribute rateably according to their respective liabilities; and no creditor of such judgment debtor shall be entitled to share in the proceeds of any such policy or policies in respect of any claim for which indemnity is not provided by such policy.

Liability of insurer absolute. (b) If any motor vehicle liability policy would, but for some misrepresentation or breach of any term, provision, or condition by the insured, be in force at the time of an accident, giving rise to a claim under the policy, no misrepresentation by the insured upon the application for such policy, and no breach of any term, provision, or condition of the policy by the insured, before or after the happening of such accident, shall invalidate the policy insofar as any person injured or suffering damage in such accident is concerned, nor relieve the insurer from liability to a judgment creditor of the insured for any loss or damage covered by such policy; and any assignment, waiver, release or discharge of such policy, or the proceeds thereof, or of any interest therein made by the insured after the happening of an accident giving rise to a claim under the policy, shall be void; provided that, nothing herein shall render void any provision of the policy requiring the person insured to repay to the insurer any sums which the latter may

have become liable to pay under the policy to other persons, in the event of misrepresentation by the insured upon the application for the policy, or breach by the insured of any term, provision, or condition of the policy; and further provided that, if the policy shall provide for limits of liability in excess of the limits required for proof of financial responsibility under this Act, the Insurer may, as against any claimant, avail himself, with respect to the amounts of such excess limits of liability, of any defence which the insurer is entitled to set up against the insured.

Conviction for offence not to prejudice civil action.

(c) It shall be lawful for an insurer to contract to indemnify the owner or driver of any motor vehicle against all loss or damage which the insured shall become legally liable to pay for bodily injury (including death resulting therefrom) or for injury to, or destruction of, the property of any person (including damage arising from the loss of use of such property), caused by the ownership, maintenance, or use of the motor vehicle, notwithstanding any violation by such owner or driver of any provision of this Act, or of any Act of this Legislature, or of any Municipal by-law, and notwithstanding any criminal offence committed by such owner or driver upon the occasion of such injury or damage; and in any action to recover compensation or indemnity for damages occasioned by a motor vehicle, a conviction of the owner or driver of such motor vehicle for violation of any provision of this Act or of any Act of this Legislature, or of any Municipal by-law, or for any criminal offence, shall not prejudice the right of such owner or driver or of any person claiming under this Act to recover from an insurer compensation or indemnity for any such damages insured by the policy.

Pro-rating of insurance.

(d) Any such policy may provide for the pro-rating of the insurance thereunder with other applicable, valid, and collectible insurance.

Insurer to furnish certificate.

(5) Any insurer which has issued a motor vehicle liability policy shall, as and when the insured may request, deliver to him for filing, or file direct with the Registrar, a certificate for the purposes of this Part.

Notice to Registrar of cancellation and expiry.

(6) Every insurer shall notify the Registrar of the cancellation or expiry of any motor vehicle liability policy, for which a certificate has been issued to the Registrar under this Part, at least ten days before the effective date of such cancellation or expiry, and, in the absence of such notice of cancellation or expiry, such policy shall remain in full force and effect.

Binders and endorsements in lieu of policy.

(7) Any Insurer may, pending the issue of a motor vehicle liability policy, issue for the purpose of this Part an interim agreement to be known as a binder, or may, in lieu of a policy, issue an endorsement to an existing policy; and any such binder or endorsement shall be subject to the provisions of this section, and be deemed to provide indemnity or insurance in accordance therewith.

R.S.O. 1927, c. 251, s. 45, amended.

5.—(1) Section 45 of the Highway Traffic Act is amended by adding thereto the following subsection as subsection (1a):—

Incapable persons not to drive.

(1a) No person shall drive, attempt or prepare to drive a motor vehicle when under the influence of drink or drugs so as to be incapable of having proper control of such vehicle.

R.S.O. 1927, c. 251, s. 45, sub.s. 2, amended.

(2) Subsection 2 of the said section is amended by inserting after the word "intoxicated" in the fourth line, the words "or of a violation of the provisions of subsection 1a and by striking out the words "not exceeding three months" in the seventh line and substituting therefor the words "of six months" and by striking out the words "not less than three months and not exceeding six months" in the eighth and ninth lines and substituting therefor the words "of twelve months" so that the subsection as amended will read as follows:—

Penalty:
Suspension or
cancellation of
license and
permit.

(2) The license or permit or, in case the licensee is also the owner of the motor vehicle, then both the license and permit of a person who is convicted of driving a motor vehicle while intoxicated or of a violation of the provisions of subsection 1a, shall be suspended by the Minister upon report of the police magistrate or justice of the peace who makes the conviction for a period,

(a) of six months for the first offence;

(b) of twelve months for the second offence;

and for the third or any subsequent offence his license or permit or both, as the case may be, shall be cancelled and he shall be declared by such police magistrate or justice of the peace to be disqualified from holding a license or permit for a period of not less than one year and not exceeding two years.

R.S.O. 1927,
c. 251, amended.

6. *The Highway Traffic Act* is amended by adding thereto the following section:—

Service of notice
or process on non-
residents.

47a. The use of a highway within Ontario by any person not resident in Ontario operating or responsible for the operation of a motor vehicle within Ontario, shall, by virtue of the right of user conferred by this Act, be deemed to constitute the Registrar an agent of such person for the service of notice or process in any action in Ontario, arising out of a motor vehicle accident in Ontario in which such person is involved, subject to the following conditions:

How served.

(a) Such notice or process may be served by leaving a copy thereof with, or at the office of, the Registrar at least ten days before the return day of such notice of process, together with the post office address of the non-resident upon whom service is to be made.

Address.

(b) The last known address of such non-resident, according to the record of the Registrar of Motor Vehicles, or other official having similar duties in the Province or State in which such person resides, shall be conclusively deemed to be the correct address of such person, for the purpose of such service.

Duty of Registrar.

(c) Upon receipt of such notice or process, and the address as aforesaid, the Registrar shall forward the said notice or process to such person at the given address by registered mail, postage prepaid.

R.S.O. 1927,
c. 251, amended.

7. *The Highway Traffic Act* is amended by adding thereto the following Parts:—

PART XIII.

ACCIDENT REPORTING, STATISTICS AND RATING

Duty to report
accident.

70. (1) Every person in charge of a motor vehicle who is directly or indirectly involved in an accident shall, if the accident results in personal injuries, or in damage to property apparently exceeding \$25.00, report such accident forthwith to the nearest provincial or municipal police officer, and furnish him with such information or written statement concerning the accident as may be required by the officer or by the Registrar.

Where person
unable to report.

(2) Where a person required to report an accident by the preceding subsection, is physically incapable of making a report, and there is another occupant of the motor vehicle, such occupant shall make the report.

Duty of police
officer.

(3) A police officer receiving a report of an accident as required by this section, shall secure from the person making the report, or by other inquiries where necessary, such particulars of the accident, the persons involved, the extent of the personal injuries or property damage, if any, and such other information as may be necessary to complete a written report concerning the accident to the Registrar.

Registrar may require additional information.

(4) The Registrar may require any person involved in, or having knowledge of, an accident, the parties thereto, or any personal injuries or property damage resulting therefrom, to furnish, and any police officer to secure, such additional information and make such supplementary reports of the accident as he may deem necessary to complete his records, and to establish, as far as possible, the causes of the accident, the persons responsible, and the extent of the personal injuries and property damage, if any, resulting therefrom.

Reports and statements without prejudice.

(5) Any written reports or statements made or furnished under this Section shall be without prejudice, shall be for the information of the Registrar, and shall not be open to public inspection; and the fact that such reports and statements have been so made or furnished shall be admissible in evidence solely to prove compliance with this Section, and no such reports or statements, or any parts thereof or statement contained therein, shall be admissible in evidence for any other purpose in any trial, civil or criminal, arising out of a motor vehicle accident.

Penalty.

(6) Any person who fails to report or furnish any information or written statement required by this Section shall incur a penalty of not less than \$10.00, and not more than \$50.00, and in addition the Registrar may suspend the driver's license and/or owner's permit or permits, if any, of any such person.

Reports by Coroners.

71.—(1) Every coroner who investigates a fatal accident in which a motor vehicle is involved, shall secure such particulars of the accident, the persons involved, and other information as may be necessary to complete a written report to the Registrar on the forms prescribed for that purpose, and shall transmit such report forthwith to the Registrar.

Registrar may request information respecting accidents and traffic control.

(2) Every provincial or municipal official or employee, hospital, or charitable institution, insurer, or other person or organization shall furnish to the Registrar such reports and other information relating to motor vehicle accident statistics and traffic control generally, as may be required by the regulations.

Compensation may be allowed.

(3) The Lieutenant-Governor in Council may allow any person or organization making reports or furnishing information under this Section, such compensation for so doing as may be deemed proper.

Duties of Registrar.

72. The Registrar shall:

To supply accident report forms.

(a) Prepare and supply to police officers and other persons and organizations, blank forms for accident and other reports which shall call for such particulars concerning accidents, the person involved, and the extent of the personal injuries and property damage, if any, resulting therefrom, and such other information as may be required by the regulations;

To investigate accidents.

(b) Make such investigation of, and call for such written reports concerning, motor vehicle accidents, traffic conditions, and other matters, as he may deem necessary and proper, and for that purpose may require the assistance of any provincial or municipal police officer;

To keep records. Accidents.

(c) Keep the following records:

Convictions.

(i) A record of all motor vehicle accidents in the Province, reported to him or concerning which he procures information.

(ii) A record of all convictions for offences under this Act or under the provisions of the Criminal Code of Canada, relating to driving on highways, reported to him pursuant to Section 58, or such other convictions as the Registrar may deem proper.

Licenses and permits suspended or cancelled.

(iii) A record of all drivers' licenses and owners' permits issued, suspended, revoked, cancelled, or revived, under this Act.

Unsatisfied judgments.

(iv) A record of all unsatisfied judgments rendered against persons holding owners' permits or drivers' licenses under this Act, or non-residents reported to him pursuant to the provisions of this Act.

Persons required to prove financial responsibility.

(v) A record of all persons required to show evidence of financial responsibility pursuant to the provisions of Part III-A of this Act.

Operating records of all drivers.

(vi) An operating record of every chauffeur and operator, which record shall show all reported convictions of such chauffeur or operator for a violation of any provision of any statute relating to the operation of motor vehicles, and all reported unsatisfied judgments against such person for any injury or damage caused by such person while operating a motor vehicle, and all accidents in which the records of the Registrar indicate such chauffeur or operator has been involved, and such other information as the Registrar may deem proper; and

Other records.

(vii) Such other records as he may be directed to keep by the Minister.

To collect and analyze accident and traffic statistics.

(d) Develop adequate uniform methods of accident and traffic statistics, and study accident causes and trends, traffic problems, and regulations;

To prepare Annual Report for Minister.

(e) Prepare for the Minister an Annual Report showing the results of such reporting, collection, analysis, and study, and embodying his recommendations for the prevention of motor vehicle accidents and the solution of traffic problems; and such report shall be printed and published forthwith upon completion.

Classification of drivers.

73.—(1) The Lieutenant-Governor in Council, upon report by the Minister that, in his opinion, the records of his Department are sufficient to warrant classification based thereon, may make regulations in accordance with which the Registrar shall classify persons who have been convicted for a violation of any statute relating to the operation of motor vehicles, or who have been responsible for accidents or who have been required to prove their financial responsibility under this Act, or whose operating record has otherwise, under the regulations shown them extra-hazardous risks for the purposes of motor vehicle liability insurance, and as such, liable to demerit rating under this Section.

Demerit rating.

How classified.

(2) When a person becomes liable to demerit rating he shall be classified by the Registrar in accordance with the regulations in any one of the three classes, to be known as Classes "A," "B," and "C," in accordance with the seriousness of his offence, or the character of his operating record.

50 per cent.,
25 per cent.,
10 per cent., sur-
charge on insur-
ance rate.

(3) Where a person has been classified in Class "A," he shall be charged and shall pay for motor vehicle liability insurance ten per cent. in excess of the standard premium rate, and when classified in Class "B," twenty-five per cent. in excess of the standard premium rates, and when classified in Class "C," fifty per cent. in excess of the standard premium rate.

Publication in Ontario Gazette.

(4) The names of persons who have been classified for demerit rating under this Section shall be published by the Registrar within one week in "The Ontario Gazette."

Insurer to certify rate charged any person and to furnish copy of any policy.

(5) Upon request of the Registrar, any authorized insurer shall certify to him the premium rate which has been charged any person for motor vehicle liability insurance and furnish him with a certified copy of any motor vehicle liability insurance policy issued to such person.

Penalty for charging improper rate.

(6) Any officer or employee or agent of an authorized insurer who charges a premium rate lower than the rate a person whose name has been published in "The Ontario Gazette" is liable to pay upon being classified under this Section, or who, wilfully, at any time, certified that a premium rate has been charged such a person other than the rate actually charged, shall incur a penalty of not less than \$25. and not more than \$500.

Re-classification
after twelve
months into lower
class.

(7) The Registrar shall, upon application after the expiration of twelve months, re-classify any person classified under this Section, whose operating record during the intervening period has been satisfactory, in the next lower class for demerit rating, or, if such person is classified in Class "A," eliminate him from classification.

Re-classification
into higher class.

(8) When any person classified under this Section commits an additional offence, or otherwise so acts as to make him liable, if unclassified, to classification under this Section, the Registrar shall re-classify him in a higher class for demerit rating in the same manner as though he had not previously been classified, or, if such person is already classified in Class "C," suspend his driver's license for a period of not less than twelve months.

Meaning of
"Standard
Premium Rate."

(9) The expression "standard premium rate" used in this Section means the rate which would be charged in the absence of demerit rating under this Section according to the schedules of rates and rules filed by an authorized insurer with the Superintendent of Insurance pursuant to the Insurance Act.

Appeal.

(10) Any person aggrieved by a decision of the Registrar under this Section, may appeal to a Board, to be known as the Appeal Board, to consist of the Superintendent of Insurance, the Deputy Attorney-General and the Registrar of Motor Vehicles, or their representatives and the decision of such Board shall be final and binding and without appeal.

Commencement
of Act.

8.—(1) Except as provided in subsection 2, this Act shall come into force on the day upon which it receives the Royal Assent.

Financial
Responsibility
provisions.

(2) Section 4 of this Act shall come into force upon the first day of September, 1930.

APPENDIX "B"
PROPOSED AMENDMENTS TO THE INSURANCE ACT

R.S.O. 1927, C. 222

STATISTICAL RECORDS

1. Add as Section 69a, the following:—

69a.—(1) Every licensed insurer which carries on in Ontario the business of automobile insurance shall prepare and file annually with the Superintendent, or with such 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, when certified and approved under the hand of the Superintendent, shall be paid by the several insurers forthwith.

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

INSURANCE RATES

2. Add as Section 275a, the following:—

275a.—(1) It shall be the duty of the Superintendent, after due notice and a hearing before him, to order an adjustment of the rates for automobile insurance, whenever it is found by him that any such rates are excessive, inadequate, unfairly discriminatory, or otherwise unreasonable.

(2) Any order made under this Section shall not take effect for a period of ten days after its date, and shall be subject to appeal within that time, in the manner provided by Section 12 of this Act, and, in the event of an appeal, the order of the Superintendent shall not take effect pending the disposition of the appeal.

(3) Any rating bureau, insurer, or other person failing to comply with any provision of such order shall be guilty of an offence.

APPENDIX "C"
**THE WORKING OF THE MASSACHUSETTS
 COMPULSORY PLAN**

(In Force 1st January, 1927)

Naturally, the operation of the Massachusetts Compulsory Law in that State, is a matter of great interest in this enquiry, and its practical results are important. I have already mentioned, and to some extent discussed, the working of this law, and while not entirely surprised at the number of those who oppose the Massachusetts law, I am astonished at the identity of the causes which they think make that law not only oppressive and unwelcome, but also unnecessarily severe.

Our sister Province of Quebec has, I see by the press, declined to adopt the Massachusetts Plan, believing that it has not reduced, but rather increased, accidents.

I append some opinions from those witnesses before me competent to speak on the matter.

Mr. P. Tecumseth Sherman, who is a New York lawyer who has for the past ten years been recognized as eminent as a specialist in automobile laws and as a student of all the problems relating to automobile insurance, both general and compulsory, points out some of the defects inherent in the Massachusetts Law, as follows:—

That those whose motors are exposed to small risk, such as farmers and others, should not be compelled to insure, whereas the law compelled all the owners to insure, though not operating; that it requires the insurance companies to give insurance, unless they were prepared to prove that the owner was unfit to have a license; that it did not afford universal protection, as, for instance, against motor vehicles coming in from other States, and those not on the highway or on private driveways; or motors owned by the State or Municipalities; and that rates which affected all classes, having to be fixed by the State, made it a political question. He also stated that as all must insure, the rate fixed in Massachusetts was not adequate to meet the losses caused, and that it violated the basic principle of insurance—namely, selection of risks.

Mr. Austin J. Lilly, General Counsel of the Maryland Casualty Company, in pointing out the defects in the Massachusetts Law, indicated his approval of the New York Financial Responsibility Law in this way: He said, that while the New York Law was to a certain extent experimental, it embodied the best principles of several laws, and got the results sought for by a compulsory insurance law without subjecting all motorists to the trouble and expense of taking out insurance, and the insurance companies to the necessity of providing suitable insurance, and that it was more justifiable on social, political and economical grounds, being selective and non-political. It did not require administration by the State except on one particular point, namely, the suspension or cancellation of the license on conviction, etc., or where damages were unpaid. A further advantage was that there was more flexibility in the character of the insurance, as the law only insisted on what a motorist really requires, and so does not improperly tend to raise the premium rates or to impose on the motorist. He said that the Massachusetts Law required a standard policy with conditions which might be harsh and unreasonable, and that his experience led him to believe that in Connecticut and New Hampshire there was an increase in voluntary insurance so that the application of the Act to individual motorists was rare.

Upon the question of whether the Massachusetts Law tended to decrease accidents, I found an unusual consensus of opinion that it did not. Mr. George A. Parker, the Registrar of Motor Vehicles for the State of Massachusetts, said that the Compulsory Act did not decrease the accidents.

This seems to be borne out by the official records submitted by Mr. Parker:—

	1925	1926	1927	1928
Fatalities.....	755	705	693	715
Injuries.....		23,351	31,721	42,201
Collisions.....		27,436	32,846	40,192
Car registrations.....		838,111	828,795	892,504
Suspension of license.....		6,706	7,707	9,562
Revocation of license.....		3,025	3,072	3,995
Court convictions.....	7,032	8,050	8,623	10,129
Liquor convictions.....	3,714	3,893	3,943	4,240

The percentage increase of fatalities in 1928 over 1927 is as follows:—

	Per Cent.
Pedestrians by automobiles	2.6
Occupants of automobiles	10.9
Bicycle riders	25.0
Adults	7.3

For 1929, as against 1928 (nine months only):—

Pedestrians by automobiles	10 individuals more.
Occupants of automobiles	25% more.
Bicycle riders	11.9% more.
Adults	71 individuals more.

Mr. William Brosmith, the experienced Counsel for the Travellers' Insurance Company of Hartford, Connecticut, said:

"As a preventative of accidents, or as a measure of improved safety on the highway, we believe that compulsory automobile insurance is a failure. We have felt, and I have taken this position on behalf of the Company, and for casualty organizations, that it is the duty of the State, in the first instance, by proper legislation and enforcing of the law, to reduce as far as possible, accidents to persons and property on the highway. When the State performs the duty it may properly require of any applicant for authority to operate a motor vehicle on the highway to show whether he has, in the first instance, the mechanical knowledge, and the physical fitness to safely be entrusted with the operation of a machine so potential for injury.

"Then, if he satisfies the inquiring official on these points, they should ascertain whether or not he has the pecuniary ability to respond to claims for damage in case, in his negligence, he injures persons or property.

"The State may properly require, if he cannot satisfy the official as to his pecuniary ability, that he should respond personally, and furnish security in some form or other—bonds, insurance, or surety bonds.

"Such a measure has been enacted into law, and is in the Statute books in one form or another in some of our States, a Financial Responsibility Law. They are in line with this view. The laws in effect, so far, with the exception of the one in Massachusetts, which has proven anything but satisfactory to the public or to the companies, wait until an injury has occurred before the applicant for authority to operate a motor vehicle is called upon to give security.

"It has been proven satisfactory to the State officials and companies, and the people through the State."

Mr. Robins B. Stoekel, Commissioner of Motor Vehicles in Connecticut, said that compulsory insurance was not a preventer of accidents, and that the Massachusetts statistics proved this fact.

Mr. Frank P. Sargeant, Assistant Superintendent for New England of the Employers' Liability Assurance Company in Boston, said that the Massachusetts Compulsory Law was unnecessary and unsatisfactory, and was not a safety measure, it being, as he added, freely admitted that it had no effect in decreasing accidents, and that it tended to increase careless driving.

Mr. Theodore P. Noyes, a Director of the American Automobile Association, and Chairman of the District of Columbia division thereof, and proprietor of "The Washington Star," said that at first he was in favour of the Massachusetts Law, but after paying close attention to its working decided that it had become the football of politics and could not be depended upon to accomplish safety results. He then made a close investigation to discover the best law, and fixed on the A.A.A. Bill. He thought its four meritorious points were: (1) That the person convicted of a serious offence was bound to show responsibility; (2) That his license was suspended till he met a judgment for damages caused by his negligence; (3) That it provided for a driving permit which could be withdrawn, cancelled, or suspended; (4) That it had a reciprocal bearing between the various States of the Union.

He thought a further merit should be attributed to it, in that it tended to reduce accidents, because the small operator knew he might be put out of business altogether if he met with an accident, and in any case that he would find it hard to get insurance.

When those connected with insurance companies in Massachusetts were asked their experience under the law, they mentioned two consequences of importance. One was the large number of claims that were made, which, of course, is natural as the number of persons insured increased; and secondly, that fraudulent claims became increasingly evident. This last mentioned fact is not a necessary consequence of the law as such, but its enactment led to an odd state of affairs. It was discovered by those insured, that only personal injury was covered by the Compulsory Insurance policy; then it became the habit, where there was any property damage, for the person whose car had suffered, to claim that he had a lame back, or strained muscles, or some other injury which was not patent, and could not be proved not to exist, as against his assertion. This course of conduct was resorted to in the hope, which generally proved true, that the insurance companies would pay a reasonable amount for damages so as to settle a possible claim for personal injury by paying a slightly larger amount for car damage.

These fraudulent claims reached great proportions, causing great trouble, expense, and litigation to the insurance companies, and are realized to be a direct consequence of the Compulsory Insurance Law as it exists in Massachusetts. Of course, the remedy for some proportion of that evil is to extend the insurance to property damage. But that is an extension of compulsory insurance which has not yet met with approval in Massachusetts, nor is it a feature in the new Bill introduced into the British Parliament for Compulsory Insurance. It, however, is included in the legislation in force in New York and Connecticut.

The next substantial feature of the Massachusetts Compulsory Insurance Plan, to which attention should be called, is that compulsory insurance of all motorists seems to require some supervision of insurance rates, a demand for which naturally arises where everybody is compelled to pay for protection by insurance, and therefore grumble at rates fixed by the companies themselves. This phase of the subject has given very serious trouble in the State of Massachusetts, for what are called "political reasons."

The law there permits the State Insurance Superintendent to fix the rate so that reasonableness may be assured in the purchase of what the law requires should be bought. In so fixing the rates naturally a large number of districts are affected, and in some of them the rates differ, owing to greater or less exposure to risk, as, for instance, due to the contrast between conditions in a big city and those in a sparsely settled township. It was found easy, if votes were wanted, to get up very considerable agitation for a reduction of rates, and in Massachusetts the evil assumed such large proportions that it recently led to the resignation of the State Superintendent, who refused to reduce the rates which he had, pursuant to the Statute, fixed on sound insurance and actuarial lines.

The only feature which was put forward as advantageous was that the brokers' or agents' commission could be reduced, because where people have to buy a thing it is not necessary to solicit their purchase in the same way as where it is a purely voluntary act. On the other hand, it would appear that the claim cost has, for the reasons I have stated, increased, and this partly, if not wholly, offsets the one favourable feature which is claimed for the compulsory insurance of all motorists.

One main circumstance that must be borne in mind in contrasting the system of compulsory insurance as now in force in Massachusetts, and the Financial Responsibility Laws, is that the opinion, which I have been able to gather from satisfactory and reliable sources, is that in the various States of the Union there are only some thirty per cent. of the motor car owners insured (some say only twenty-six to twenty-seven per cent.), and that the passing of any compulsory insurance law would affect something like seventy per cent. of the motor owners. It is, therefore, a law imposed upon the great majority of motor owners, not because of any fault of theirs, but on account of the wrong-doing of certain other individuals who have caused injury by carelessness or recklessness. It is, however, a law which has to be obeyed by those who desire to drive on the highways, and consequently brings everyone within its orbit.

In England, which is considering the adoption of a compulsory law, conditions are radically different. Over there the insurance companies testified that ninety per cent. of the motorists are insured, both against third party liability for personal injuries, and property damage, so that if the Bill is passed it will only impose compulsory insurance on a minority of ten per cent., who are either unable to pay the cost of insurance, or are willing to take chances of becoming personally liable.

Mr. G. Gleason, of Boston, Counsel for the Employers' Liability Assurance Corporation, said:

"Assuming that the law is constitutional, as we must, so far as Massachusetts is concerned, it was passed for only one purpose, and that was to make sure that the owner of every automobile was financially responsible. They say now that it was not urged that it would be a safety measure. My memory is that that is not correct. They did say it would be a safety measure, but it has turned out to be absolutely the opposite, in my opinion. Accidents, injuries, and deaths are increasing. The figures you can obtain from the Registrar of Motor Vehicles, and I hope you will, for the years 1925, 1926, 1927, 1928, and 1929, will show that injuries and accidents are really alarming, and are occurring much more rapidly than the registrations are increasing.

"It is now freely admitted by everybody, that it never was intended to be a safety measure. I do not say that they admit that it is increasing accidents, but they certainly cannot contend that it is decreasing accidents. I believe that it is absolutely true that the law has tended to increase careless and negligent driving. Before our law was passed, thirty per cent. of the people carried insurance. Now, in theory, 100 per cent. carry insurance. To begin with, I believe any kind of insurance tends to increase carelessness, and maybe fraud.

"Our compulsory law is absolutely different from the Connecticut Law or the New Hampshire Law, or the New York Law. All of these other laws, in my opinion, tend somewhat toward safety, and after all, that is the way this question should be approached."

He adverts to one feature disclosed after the law had begun to operate, thus:—

"We have, according to one of our inspectors, 5,000 cars which are on the road without number plates, where the registration has been cancelled and where the number plates cannot be obtained, and an article appeared in "The Boston Sunday Globe," within two weeks, which said: 'In 1927, Mr. Goodwin, former Registrar of Motor Vehicles, said there were 2,000 of these cars, and this Inspector of the Highway Department appeared before our Commission and said the number was 5,000. Whether it be 2,000 or 5,000, it is a large number.'"

Mr. Fred. L. Reynolds, of Boston, head of the Claims Department in the Employers' Liability Assurance Corporation, deals with another development:—

"From a claim standpoint, as I see it, you have thrown into the insurance field, through the institution of this Compulsory Act, people who never had insurance before and know nothing about it. They do not understand what liability insurance is, and every body thinks that every loss is going to be paid if there is an accident, no matter what degree of negligence is shown by the parties concerned in the accident.

"That has a tendency to greatly increase personal injury accidents particularly. It has caused the commercialization of the accident business to an alarming extent among certain types of lawyers and doctors. We have thousands of cases now that we did not have before, of everyone in the car claiming injury, no matter how slight the damage to the car. That is true, I think, whether the party has property damage insurance or not, to some extent, but it is true to a very great extent where it is found out that the party driving the automobile was not covered for property damage."

He adds that the insurance companies who have to dispute these claims "cannot get any co-operation from the driver or the assured, and are stuck in this kind of a case."

The following statistics were given during Mr. Reynold's evidence; but I am bound to say that they should be taken with reservations, as Mr. Reynolds does not seem to have allowed for the natural increase of claims caused by the introduction of compulsory laws against all motorists:

"In 1926 there were 3,357 personal injury automobile accidents, and there were 15,162 property damage accident claims, 2,800 personal injury claims, and 8,441 property damage claims.

"In the first year of Compulsory Insurance, 1927, personal injury accidents increased so that the figure was 6,188 personal injury accidents, while property damage only increased 1,000. There were 16,154 property damage accidents, claims for personal injury were 4,580, and property damage claims 8,712.

"In 1928 personal injury accidents were 7,149, and property damage accidents dropped to 15,761, and claims to 5,552; that is, for personal injury claims; and property damage claims 9,499.

"These figures that I have given you are for these three years, and it is only the first seven months of the year 1929 that I can give, but they seem to run in the same trend."

"For 1929, the first seven months, there were 4,025 personal injury accidents and 8,845 property damage accidents. There were 2,686 claims for personal injuries, and 4,950 property damage claims, that is, in the first seven months.

"These figures clearly indicate to me that we are getting a big increase in personal injury claims without the corresponding increase that would be expected in property damage claims. I do not think that can be accounted for by the fact that some people do not insure for property damage. I think it is accounted for by the fact that the people are claim-wise, and that every accident brings a claim."

This accords with the conclusions of the California Committee, who say :—

"Politics have entered into the administration and operation of the Massachusetts Law. Promulgation of rates as required by the law has been denied on the ground of political expediency, and the rates themselves have been determined on the same basis. The resignation of an Insurance Commissioner, esteemed both in the State and throughout the country for his capability, was forced, and chaotic conditions obtained. The State lost the services of several important casualty companies, due to the attempt to force them to write insurance at ruinously low rates, before an appeal to the Supreme Court of the State resulted in an order for the long-denied promulgation of new rates. And as the latest step in the progress from one evil to another, the new rates have been kept from being still higher only by the action of the State in directing an arbitrary and sweeping reduction of agents' commissions.

"With accident prevention and safety consideration admittedly thrown into the discard as impelling motives for compulsory automobile insurance, the prospect of monetary compensation to the injured remains as its only substantial justification; and the results of the Massachusetts experiment appear to demonstrate not only that it is less effective in this direction than voluntary insurance, but also that the cost is out of all proportion to the benefits derived.

"It is the opinion of the Committee, in the light of present experience, that it will be unwise for the State of California, with the complicated problem that confronts it, to embark upon any such dubious legislation as that in which Massachusetts, with a far lesser problem, has become entangled. In this conviction, as has been noted elsewhere, the Committee is confirmed by the unequivocal opinions of local and nation-wide bodies."

I gleaned, while in Boston, some information which led me to think that the practical defects in the law, and its administration, which have been pointed out, may lead to the adoption of some improvement in its scope in the following directions:—

(1) The establishment of a Board similar in composition and intent to an Industrial Accident Board, which would handle claims arising under this law, so as to facilitate its operation, with a right to the insured party to elect, within a stated period of time, whether he would have his case determined by the Court or by the Board. This Board would pass on the claims. The reason for this suggestion is that the civil courts are flooded at the present time.

(2) Provision for a \$100.00, deductible amount so that the insured is his own insurer up to the extent of \$100.00. It was thought that this would make a large difference in the amounts which companies have to pay out each year for losses—a very substantial difference. That view was supported by the statement that if a man is not injured to more than the extent of \$100.00, he should take his chance on getting it out of the person who injured him. If that deduction could be made it would reduce the rates possibly ten or twelve per cent. This, while preserving protection for serious injuries, but not where a person was only slightly injured.

(3) Unless the claim of the injured party was paid, including those under \$100.00, the license should be revoked.

These so-called improvements seem to me rather fundamental, when the principle of the Massachusetts Law is considered, and very strongly reinforce the argument

used against the law. The suggestion for a Board to pass on the claims because the Courts are flooded with these cases is strong indication that the evidence is correct which says that claims accumulate to a very large extent, and that there are, in addition to these, an extraordinary large number of small fake claims for personal injuries where only property damage is suffered.

The deductible liability of \$100.00 is obviously intended to get rid of these fake claims, or the large mass of claims arising, perhaps, legitimately, but they certainly indicate that the working out of the Act has produced an extraordinary number of claims, legitimate and faked, and that the Act, to work satisfactorily, would require to exclude claims of under \$100.00, and to have a special Board to deal with these that are left.

APPENDIX "D"

EVOLUTION OF THE COMPULSORY INSURANCE IDEA

I made a successful effort to ascertain and follow up the initiation and evolution of the idea of Compulsory Insurance on this continent in its various forms, as outlined by those concerned in the question in its earlier and later development. I did so with the idea that the evolution of this idea might prove useful to myself in understanding what were the problems dealt with, in what way they were handled, and the changing points of view arising when the legislation was taking shape.

The idea arose first in Massachusetts, probably as early as 1920, but came to a head early in 1924, the result of agitation with regard to possible legislation to take care of unsatisfied judgments for damages due to automobile accidents. The insurance companies were interested, and meetings were held, not only by company executives, members of the Association of Casualty and Surety Executive Officers, but by prominent insurance agents, at one of which the Massachusetts situation was explained to them by Mr. Stone, of Boston, who finally evolved the New Hampshire statute on the subject.

The result was the appointment of a "Committee of Nine," who set themselves to find out just what the facts were, and if there was any reason in the Massachusetts situation for the kind of legislation suggested. This Committee of Nine, which functioned for some five years, proposed at first to ascertain the number of unsatisfied judgments which had caused the agitation to spring up, but they found that the difficulties were such that they were never able to find out exactly the percentage of unsatisfied judgments, though they were able to reach some conclusions as to certain percentages and figures.

In 1925 the Committee of Nine made a Report, which, in effect, made the following findings:—

- (1) That the prime and fundamental need was to prevent accidents, and that all regulatory legislation should be framed with that end in view.
- (2) That Compulsory Insurance, or pecuniary responsibility, was but a partial answer to the question; and,
- (3) That it was not justified unless by way of prevention of accidents, or unless it was ascertained that the pecuniary loss suffered by victims of accidents, was exceedingly grave.

This Report came out at a time when, in the State of Massachusetts, and other States, Bills were being introduced having Compulsory Insurance in view, either through insurance companies, or by the establishment and management of State funds. These proposals were watched, and it was evident that the growing volume of proposed legislation indicated an increasing public opinion in favour of some sort of Compulsory Insurance. The Committee of Nine, in their later Report, had only given a very guarded approval to Compulsory Insurance, as they considered the experience of Massachusetts to be distinctly unfavourable. In 1928 the American Automobile Association began to take the matter up, owing to pressure from automobile clubs all over the United States. This action coincided with that of the Committee of Nine, who were getting public opinion on the subject, but from entirely different sources.

The American Automobile Association appointed a sub-committee to deal with the matter, having come to the conclusion that they could not longer resist the pressure that was being brought to bear in favour of some stringent measure, and their conclusions when reached, happened to coincide with the result independently reached by the Association of Casualty and Surety Underwriters in about October, 1928.

The consequence was that the Committee of Nine were invited to have a joint consultation with the American Automobile Association Committee, and they took up together what was practically the first draft of what became known as the "A.A.A. Bill."

This draft was finally considered by the two Committees, together with other automobile interests, such as the General Salesmen and Agents' Association, and organizations representing manufacturers of automobiles, accessories, tires, etc.

In the final draft no principles were changed or affected, but the matter was put into its present shape with the approval of both these bodies, and then submitted for

public attention and criticism. In the end, the State of New York embodied the A.A.A. Bill in the New York Financial Responsibility Law in its present shape, and, as subsequently amended, it is in force throughout that State.

Mr. Augspurger, President of the New York Automobile Club, and Chairman of the American Automobile Association Safety Responsibility Committee, although himself President of an insurance company—the Merchant's Mutual Casualty Company, and the Guardian Casualty Company, both of Buffalo, New York—gave some interesting contributions as to the history of the agitation, pointing out that the American Automobile Association was composed of nearly one million automobile owners in the United States, and, as stated by him, the largest organization of motorists and owners in the world. He added that the United States Chamber of Commerce had been against compulsory insurance, as was the American Automobile Association originally, on the ground that it would not tend to reduce accidents, and also against that other form of compensation which would involve compensation for injuries to property and person being taken over and becoming a matter of State or Government concern; that is, compensation insurance undertaken by the Government.

In the end, and with the co-operation and agreement of manufacturing interests, dealers, and motor vehicle associations, the New York Automobile Accessories Manufacturing Association, and the New York City Automobile Dealers' Association, the A.A.A. Bill was widely circulated throughout the United States, and received the unanimous approval of the newspapers, magazines, and trade journals throughout the country.

This Bill, according to the official publication of the Association, recognizes that:

"The streets and the highways are public assets; that the automobile is a vital factor in the country's business, social, and economic life, and that the large class of law-abiding, careful drivers, should be permitted the use of the streets without subjecting them to unreasonable burdens, financial or otherwise. For this reason, the Safety Responsibility Law is frankly directed at the small minority of reckless and irresponsible motor vehicle operators to whom are chargeable the mounting toll of loss of life and injuries to persons and property."

In the meantime, the National Chamber of Commerce, under the impulsion of President Hoover (then Secretary of Commerce) had started and carried on an independent examination of the question in 1924, 1925, and 1926. In the latter year the Chamber reported that during 1926:

"The accident hazard in the States having modern motor vehicle legislation is less by some twenty-five to thirty per cent. than it is in other States which do not have such vehicle legislation. These figures appear to be supported by the data gained from the experience of automobile insurance companies, and that in New York State, since its new automobile law went into effect, this State has recorded a decrease of ten per cent. in automobile accidents, as compared with the preceding year."

During all this time there was a continuous agitation for a plan similar to the Workmen's Compensation for Injuries plan. This was largely due to the fact that all the States in the Union (except four) have Workmen's Compensation laws, and naturally in every State there was a strong urge towards that form of legislation. Instead, however, of it finding favour, the only States which have adopted Compulsory Insurance in any form, have deliberately turned their backs upon a compensation plan, similar to that known as the Workmen's Compensation Plan.

The Massachusetts Compulsory Insurance Law was, during the period I have outlined, passed by the Massachusetts Legislature, and came into force on the 1st of January, 1927. It has had much attention paid to it during the discussion of the evolution and adoption of the laws which now cover some fifteen States, as it was the only working example of an interesting experiment, from which observers could draw conclusions as to its reaction on the inhabitants of the State of Massachusetts, to aid them in solving the problem common to all. I have already dealt with its scope and effect, and its working in the light of the information I have gained, in order to indicate why it has so completely failed to command acceptance in any other State of the Union.

APPENDIX "E"

COMPULSORY INSURANCE LAWS IN OTHER COUNTRIES

Before doing so, however, it is proper to give an outline of what has been done in the way of Compulsory Insurance Laws in other countries. For part of my information I am indebted to Mr. A. J. Lester, editor of "The Canadian Insurance Law Service for a resume of some of the laws enacted in Europe:

Norway.—Compulsory automobile liability insurance has been in force in Norway since 1912. Owners of motor cars are obliged to deposit in the police offices in the districts in which their cars are registered, a guarantee or a policy, issued by an authorized insurance company, covering liability to third parties, arising out of motor vehicle accidents. Foreign cars entering Norway must make a cash deposit. The insurance policies are written by private companies, which are accorded the right to refuse risks.

Denmark.—Compulsory automobile liability insurance was adopted in Denmark in 1921. The insurance is written by private companies under special rules and regulations issued by the Department of Justice. The companies may not refuse applicants for insurance. Foreign cars coming into the country must take out insurance, which is arranged through the Customs officials at the border.

Sweden.—In Sweden, a law was enacted in 1929, effective January 1st, 1930, compelling the owners of motor vehicles to carry insurance covering injuries to third parties and damage to property, up to a stipulated amount.

Czecho-Slovakia.—Definite information concerning the compulsory automobile insurance law in Czecho-Slovakia is not obtainable, but press reports indicate that there is in force there some kind of a compulsory automobile liability insurance law.

Switzerland.—The traffic laws of Switzerland are Cantonal and Federal. As far back as 1914 various Cantons had entered into an agreement for common regulation, called a "Concordat." Twenty Cantons have now adopted the Concordat, one of the provisions of which is that, as a condition to obtaining a driver's license, the applicant must furnish proof that he is insured to secure the payment of any liability incurred by him for bodily injuries or death caused by a motor vehicle accident, up to stipulated amounts. The policy must be written by an authorized company, and cover all accidents caused by the vehicle, whether driven by the owner or some other person with his consent. The remaining five Cantons have adopted similar provisions.

One of the unique provisions of the insurance so required, is that the insured must himself bear one-tenth of each loss, including all loss up to one hundred francs. It is said that this so-called deductible clause works well and is generally deemed to be highly effective in promoting safety, eliminating petty claims, and claims by guests, and is entirely satisfactory to the insurance companies. Foreign automobiles are not required to give evidence of financial responsibility.

France.—It appears that liability insurance is not presently compulsory for motorists in France, but it is reported that an old Bill, long pigeon-holed in a committee of Parliament, proposes to pave the way for Compulsory Insurance, by establishing a State fund to provide the insurance at cost. The proposal involves requiring the assured to retain one-twentieth of the risk.

Germany.—Compulsory automobile liability insurance is not in force in Germany.

Hungary.—A measure providing for compulsory third party insurance was laid before Parliament in Hungary about three months ago. It makes the insurance of public service motor vehicles obligatory, and empowers the Minister to extend the measure to privately owned motor vehicles. Licensees may show evidence of financial responsibility, either by a certificate of insurance issued by an authorized insurance company, or by depositing cash or security. The police authorities are forbidden to issue a license unless the applicant produces a certificate of insurance or has deposited the necessary security. The Minister is authorized to exempt from the law companies which are obliged by law to publish a balance sheet showing their financial standing, and which are in a position to meet any financial obligations arising out of accidents connected with their vehicles, as well as municipal and district authorities operating public vehicles.

New Zealand.—The Bill introduced into the House of Lords in England for compulsory insurance is based upon an Act passed in New Zealand in 1928 which came into force on the 1st day of January, 1929. It differs in many respects from the present English Bill and is much more drastic. So far no information as to its working has come through from New Zealand and all that is said about it in the evidence given before the Royal Commission on Transport in England is very little. In fact, no estimate of its success or working was offered.

The New Zealand Act requires all owners to insure against liability to pay damages on account of accidents resulting in the death of, or bodily injury to, any other person. The liability of the insurance company is limited to £2,000 for any claim by any passenger in the motor vehicle, with a limit of £20,000 for all claims made in respect of such passengers. Otherwise it is unlimited. It does not, however, cover injury to relatives or servants, or gratuitous guests in the vehicle. It enures to the benefit of the owner of the motor vehicle for the time being, notwithstanding any change in its ownership. The owner, on an application for a license pays his premium for insurance according to the prescribed form, and no license is granted without evidence of insurance. The contract of insurance is complete on the payment of a premium and is available to the person injured as a charge upon the insurance moneys, notwithstanding death or insolvency of the owner, and may be sued for, in which case the party injured has the same right as if the owner were bringing the action. The power to settle claims is reserved to the insurance companies, but passengers for hire cannot contract themselves out of the Act. Any insurance company may apply for the cancellation of a driver's license. The rates to be charged by the insurance companies are to be governed by regulations made by the Governor-General by Order-in-Council. Differential rates may be fixed which the owners are not allowed to vary.

England.—The English Act is much simpler, and will, no doubt, be passed into law. The British House of Lords is now considering a Compulsory Insurance Law, and the provisions of the Bill as introduced, so far as it deals with that subject, are as follows:

It shall not be lawful for any person to use, or to cause or permit any other person to use, a motor vehicle on a road unless there is in force in relation to the vehicle while being so used, such a policy of insurance, or such a security in respect of third-party risks, as complies with the requirements of the Act. This provision makes it unlawful for a motorist to drive on a highway unless he has a policy of insurance in force protecting third parties.

If a person acts in contravention of this section he is liable to a fine not exceeding fifty pounds, or to imprisonment for a term not exceeding three months, or *to both such fine and imprisonment*, and a person convicted of an offence under this section shall (unless the Court for special reasons thinks fit to order otherwise and without prejudice to the power of the Court to order a longer period of disqualification) be disqualified for holding or obtaining a license for a period of twelve months from the date of the conviction. There are severe penalties for the offence of driving without securing a policy.

A person disqualified by virtue of a conviction under this section, or of an order made thereunder for holding or obtaining a license, shall be deemed to be disqualified under the other provisions of the Act dealing with the qualifications for a license.

The Act does not extend to vehicles owned by local authorities, by police authorities, or by the Receiver for the Metropolitan Police District, or to invalid carriages.

In order to comply with the requirements of the Act a policy of insurance must be a policy which is issued by an authorized insurer, and which insures specified persons or classes of persons in respect of any liability which may be incurred by them in respect of the death of, or bodily injury to, any person caused by or arising out of the use of the vehicle on a road.

Such a policy shall not be required to cover a servant in respect of death or bodily injury in the course of his employment, or passengers either being carried in, or entering or alighting from the vehicle, unless passengers for hire.

An important provision is the following: "A policy shall be of no effect for the purposes of this part of this Act unless and until there is delivered by the insurer to the person by whom the policy is effected, a certificate of insurance,

in the prescribed form and containing such particulars of any conditions subject to which the policy is issued, and to any other matters as may be prescribed, and different forms and different particulars may be prescribed in relation to different cases or circumstances."

It is also specifically enacted that any condition providing that no liability shall arise under the policy, or that any liability so arising shall cease, in the event of some specified thing being done or omitted to be done *after the happening of the event giving rise to a claim under the policy*, shall be of no effect.

Any provision, however, in a policy requiring the person insured or secured to repay to the insurer any sums which the latter may have become liable to pay under the policy, and which have been applied to the satisfaction of the claims of third parties, shall be effective.

There are similar provisions to the foregoing with regard to securities other than policies of insurance. The remaining clauses of the Act (38, 39, 40, and 41), deal with the production of the certificate of insurance on certain occasions, the powers of the police in regard thereto, the right to make regulations which is vested in the Minister of Transport, and an amendment to the Insurance Act, which are not of importance in this inquiry.

It will be observed that the insurance which this Act provides for is confined to liability incurred in respect of the death or bodily injury to any person, caused by, or arising out of, the use of a vehicle on a road, and does not include insurance against property damage.

With respect to what it does cover, however, the insurance is unlimited, and one important provision is that contained in Section 37, whereby no condition in the policy shall absolve the insurance company from liability, by reason of any specified thing being done or omitted to be done *after the happening of the event giving rise to the claim*.

In Great Britain evidence was given that ninety to ninety-five per cent. of all motorists are insured, both as to public liability and property damage.

It is, however, interesting to note, in considering the relative complexity of the traffic problem and the experience to be derived from its operation, that in England there were in 1928 some 2,036,000 cars in use, in the United States some 23,000,000, and in Canada somewhat over 1,000,000.

While I make no recommendation regarding the speed limit I may mention that at a Conference with the Minister of Transport in England the Borough Councils decided to recommend to him the retention of the speed limit in Inner and Outer London.

CONNECTICUT

(Original Act effective January 1st, 1926)

The law provides that any person who has been convicted of violation of certain provisions of the Motor Vehicles law (i.e., reckless driving, driving while intoxicated, evading responsibility, etc.), or who has been involved in a motor vehicle accident causing injury to persons or substantial damage to property, may be required by the commissioner of motor vehicles to show evidence of financial responsibility by filing a certificate of insurance or other security, for the payment of claims for injuries to persons or damage to property (up to specified limits) incurred in future accidents, in default whereof his driving license may be suspended.

In 1929 the law was amended to provide:

(a) That upon complaint that a judgment for a sum other than costs or nominal damages in an action arising out of the operation of a motor vehicle has remained unpaid for more than 60 days, without notice of appeal, the commissioner of motor vehicles shall suspend the operator's license and may suspend the registration of any motor vehicle owned by him until proof that such judgment has been satisfied; and

(b) That the commissioner shall classify all persons from whom proof of financial responsibility is required in three classes: "A," "B," and "C," according to the seriousness of their offences, and that insurance companies shall charge for insurance in excess of the standard rate, ten per cent. for a person in Class "A," twenty-five per cent. for a person in Class "B," and

fifty per cent. for a person in Class "C." Where a person so classified has committed no offence and been involved in no accident during the preceding twelve months the commissioner shall reclassify him in the next better class, or, if he is in Class "A," eliminate him from classification. A person already classified may, for a further offence, be classified in a worse class.

NEW HAMPSHIRE

(Original Act effective June 1st, 1927)

The law provides that where a person is involved in a motor vehicle accident resulting in injuries to persons or damage to property, he may be haled into court in preliminary proceedings in an action against him for damages, and if then found to be probably liable, shall—unless he can produce evidence of insurance coverage complying with the specifications set forth in the law—be required to file security for the payment of whatever judgment may be recovered against him (up to specified limits) in default whereof his driving rights shall be suspended.

In 1929 it was provided that in lieu of, or in addition to, the above described court proceeding, the motor vehicle commissioner shall, if requested by the injured party, or may, upon his own motion, investigate to determine whether the owner or operator of such vehicle is probably liable for, and financially responsible to, the amount of the damages suffered (up to specified limits), and if the commissioner is not satisfied he shall require the operator to file with him a certificate of insurance. If the person fails to comply with these provisions the commissioner shall suspend his operator's license and the registration of all motor vehicles owned by him.

The provisions in the new law dealing with a speedy hearing was described to me in this way:

"The New Hampshire law provides that a person who has been injured as a result of an automobile accident in New Hampshire on the public ways, or otherwise, if he brings a suit may, in addition to bringing a suit, and immediately thereafter, file a petition in court to have the court determine the financial responsibility of the defendant.

In 1929 this law was amended for the sake of making things move a little more speedily to provide that this petition might also be filed with the Registrar of Motor Vehicles, and allowing him to have a hearing, about which I am going to speak.

At this hearing, which is held immediately, if the petition be brought in Court and before the Registrar, if it be requested of him, the parties are heard, informally, and it is decided whether or not the defendant was probably wholly at fault.

If he decides that the Defendant was probably wholly at fault he orders that the defendant do immediately put up security, sufficient in his judgment to satisfy any judgment which later on might be obtained against the defendant.

If the defendant has an automobile insurance policy the certificate of the insurance company is sufficient to comply with the order of the Judge or the Registrar that a certain amount of security be furnished.

THE COMMISSIONER: Suppose the man has not got with him his insurance policy and he lives in Ontario and is insured there. What evidence would he have to give that he had such a policy?

A.: He would not have to give any evidence. The certificate of the insurance company would be sufficient. Of course he has seven days' notice in which he is notified that he has to appear for this hearing. When I said "immediately," he has seven days' notice.

The supposition is that in seven days, by telegraphing his company, they could mail a certificate, or authorize their agent in New Hampshire to furnish the certificate.

A.: If a person involved in an accident against whom this order is made, is a foreign owner, and does not therefore have a license to drive in New Hampshire or have his automobile registered there, he shall thereafter be forbidden from operating any car in New Hampshire, or having operated in New Hampshire any car he may own.

APPENDIX "F"

COMPENSATION PLAN SIMILAR TO WORKMEN'S COMPENSATION LAW

It might be well, at this stage, to deal with the compensation plan, because it has received very considerable attention in the United States, due to the fact that the vast majority of the States there deal with Workmen's accidents on that plan, and the natural thought arises, why should this not be applied to an equally large and important class of accidents. Besides, I have received from the Ontario Joint Legislative Committee of the Railway Brotherhood, and a few others, commendation of the idea that motor vehicle insurance should be carried by the Government at cost, or approving of the application of the workmen's compensation principle to motor accidents.

The first fact that stands out is that notwithstanding that the attention which the subject I have mentioned has received, and the persistent advocacy of this plan in many of the United States, none of the suggestions involved have found acceptance in any State of the Union.

This is due, I think, to the fact that when carefully examined there is a fundamental difference between industrial accidents and motor vehicle accidents, in that the one is dealt with on the basis of an absence of fault, whereas motor vehicle accidents always involve negligence of one or two parties. To deal with them both on the basis of absence of fault would enable those who caused a motor accident, and were injured thereby, to be classed with those who were injured without being in any way to blame, an extraordinary reversion of the present law upon the subject, and calculated to cause an enormous burden either on the State or on the whole body of motor users, the vast majority of whom are not responsible for accidents because of their cars in driving. For it must not be forgotten that, although accidents are frequent and serious, and are usually due to carelessness, recklessness and drink, the proportion of accidents to the number of occasions on which an accident might happen, is small, and if compared with the number of motors is also of little proportional value.

Another grave difficulty is finding any legitimate source from which the cost of the compensation is to come. In a Workmen's Compensation Plan the accident is treated as one of the business expenses of the organization. In fact, part of the general cost of production, and as such is passed on to the general public, and the contribution, therefore, which the manufacturer or master makes to the fund is distributed and ceases to be a serious burden on anybody. It is impossible to deal with motor accidents in the same way. The cost of compensation must fall upon the general body of motorists, or on the State, and cannot be passed on to anyone else. If there is no negligence involved what reason is there to impose the cost of compensation upon the motorist alone? Why should not the cost of all accidents upon the highway, in the cellar, or in the woods, or anywhere else, be similarly treated?

As casualty insurance is available to each motorist so that he carries with him the means of satisfying the cost of any injury he does, there seems to be no good reason or indeed, any even plausible reason, for unloading upon the State or upon the general body of motorists, the cost of what belongs individually to and is caused directly by each wrongdoer.

There are many other phases of workmen's compensation for industrial accidents which are not capable of application to motor vehicle accidents. Consider for a moment the scale of compensation for injuries allowed. In industrial accidents the workman bears a portion of the loss due to the accident, and is indemnified in part only, usually on a scale of 50% or 66 $\frac{2}{3}$ % of his regular wages. In the case of victims of motor vehicle accidents, there are many who do not earn any wages, for whom no "ready-made" standard of measurement is available to determine the compensation which the victim ought to receive. Victims entitled to full indemnity, under the common law principle of liability for negligence, are not ready to surrender their right to full indemnity for a partial indemnity payable regardless of fault.

Invalid and fraudulent claims by injured workmen under the compensation system are restricted, not only by the partial indemnity feature of the compensation plan, but also by the fact that the employer selects his own workmen, selects them with care for their reliability and honesty, as well as for their efficiency as workmen, or has at least a chance to do so. He has the right to discharge them and end the employment if they attempt to defraud the employer through unjust claims for compensation. No such possibilities of check or restrictions exist in relation to claims

for injuries due to motor vehicles. The victim and the person against whom the claim is made are strangers to each other, and the person liable to pay has no control or supervision over the future employment or conduct of the victim.

I have not heard any reasonable suggestion that the Government should undertake this kind of insurance, nor indeed have any been put forward other than by pointing to the Workmen's Compensation plan as a familiar instance of government management of a so-called similar problem. That is not a good reason in this Province, for here the fund for workmen's compensation is one contributed by the employers, and the difficulty persists, in the case of a motor accident fund that there is no one, other than the offenders, who ought to be asked to contribute. The Government has undertaken no liability to contribute to the accident fund, and in order that the contribution from employers should be limited to what are considered reasonable amounts, provision is made that:

(a) The amount of the indemnity is fixed by statute on a definite scale, which does not require the exercise of discretion or discrimination;

(b) No question of legal right to compensation arises, since the compensation is payable regardless of fault and becomes a statutory right of the victim;

(c) A limited number or section of the general public, consisting on the one hand of large business and industrial organization, and on the other of wage earners, is affected by the operation of the plan.

None of these conditions are present in the case of automobile liability insurance. The amount of compensation is always a question at issue between the claimant and the defendant, and is a question of fact to be determined in ordinary course by a Judge or jury. The question of legal liability is also essentially an issue, and is a mixed question of law and fact to be determined by the Court, in the absence of agreement between the parties. Those affected are individuals only, one or both negligent, and include no class capable of making any large contribution to any fund without grievous hardship to individuals.

To expect any Government to provide not only a vast fund to compensate individuals, when the same result can be obtained from companies organized to meet the demand, and to establish a huge department with a competent and extensive staff to deal with each daily crop of accidents, to settle the liability, hear witnesses, and measure the fault, would be directly contrary to the principle of the Ontario Workmen's Compensation Act, and an advance on anything undertaken by any Government, either with respect to Workmen's Compensation, or as to automobile liability insurance.

For these reasons, and others which have been adduced elsewhere, I am entirely opposed to any such plan. In Exhibit No. 78 to this Report, Mr. P. Tecumseh Sherman's pamphlet, will be found an exhaustive examination and criticism of proposals made in various parts of the United States for compensation for motor accidents on the Workmen's Compensation principle.

Without attempting to recapitulate his views, I may say that Mr. Sherman scouts the idea that a law similar to the Workmen's Compensation Law is in any way comparable to this Massachusetts legislation, because the Workmen's Compensation Law is based upon compensation for accidents, regardless of fault. Any comparison, therefore, he thinks, between the two sorts of legislation, seemed to him to be out of the question, because to admit the principle that everyone injured in an accident should be compensated, regardless of fault, would at once impose upon the mass of motor owners a liability for which there is not the slightest shadow of a reason. The motorist who injures anyone has no right to call upon the entire company of motor owners to compensate the person he has injured.

He further points out that compensation, regardless of fault, so far as motor owners were concerned, might in practice take any one of a multitude of different forms. These might be as follows: The law might be exclusive or optional, and the insurance individual or collective, and might apply to accidents on public ways only, or to private property. It might be limited to collisions between motor vehicles, or between a motor vehicle and a pedestrian. It might include or exclude passengers. It must provide for liability or non-liability, according to who happens to be driving it. There are, as well, other variations which it is not necessary to mention, all of which would have to be covered by any compensation scheme, provided it was based upon one fault. The complexity of ways in which accidents may happen in connection with motors is in itself, as he points out, a very serious difficulty, the surmounting of

which has caused the failure of every suggested "Compensation Without Fault" Bill introduced or discussed in any of the United States legislatures.

If such a scheme were adopted it must include all the competent and careful motorists, as well as the criminally careless and incompetent, and provide not only for the accidents caused by the fault of the motorists, but also for all the accidents happening to everybody, no matter how they may have been caused. Judging from the increase in motor vehicles and the consequent multiplicity of accidents which are keeping pace with that increase, this would soon involve a colossal sum, and require the creation of an enormous fund.

The Legislative Committee of the State of Massachusetts has just recently (January, 1930) reported against the establishment of a State Fund to compensate injured motorists. This plan has also been considered (January, 1930) by the Columbia University Committee on Compensation for Automobile Accidents, but so far it has contented itself with pointing out the legal, economic, and constitutional difficulties that it involves.

APPENDIX "G"

LIST OF WITNESSES

*Who gave evidence respecting Compulsory Insurance and Safety
Responsibility Laws.*

(a) IN TORONTO:

<i>Witness</i>	<i>Occupation</i>	<i>Page</i>
John B. Laidlaw.....	Chairman, Canadian Automobile Underwriters' Association.....	84
Ross Beckett.....	Mayor of the City of Stratford..	3029
Robert James Browne.....	Police Magistrate, City of Toronto	3039
R. Beverley Robson.....	Mayor, City of Guelph.....	3047
F. J. Mitchell.....	Councillor, City of Windsor.....	3062
George Meredith Orr.....	Vice-President, Ontario Fire and Casualty Agents' Association..	3067
A. E. Mallaby.....	Councillor, Town of Weston.....	3069
H. A. McLaren.....	Councillor, Town of Weston.....	3073
David McKinney.....	Inspector, Toronto Police Department.....	3076
T. N. Phelan, K.C.....	Representing Ontario Motor League.....	3090
R. Rodness.....	Representing Labour Party of Ontario.....	3130
Leon Frazer.....	Industrial Commissioner, City of Oshawa.....	3134
Leopold Macaulay, K.C., M.L.A.....	Member of Legislative Assembly, Province of Ontario.....	3148
T. Marshall.....	Transportation Adviser, Toronto, Board of Trade.....	3155
Daniel J. Coffey.....	Barrister-at-Law, Toronto.....	3158
F. W. Wegenest, K.C.....	Representing County of York Law Association.....	3166
J. P. Bickell.....	Registrar of Motor Vehicles, Province of Ontario.....	3194
Dr. Fred W. Routley.....	Secretary, Ontario Hospital Association.....	3197
H. K. Carruthers.....	Manager Automobile Club, Ottawa	3206

(b) IN THE UNITED STATES:

ALBANY:	Hon. Charles A. Harnett, Commissioner of Motor Vehicles, New York State.....	1521
	John P. Hennessy..... Deputy Commissioner of Motor Vehicles, New York.....	
	William F. Dineen..... Deputy Commissioner of Motor Vehicles, New York.....	

<i>Place</i>	<i>Witness</i>	<i>Occupation</i>	<i>Page</i>
NEW YORK CITY:	Hon. Albert Conway	Superintendent of Insurance, New York State	1580
	Joseph J. Magrath	Chief of Rating Bureau, Insurance Dept., State of New York	
	Isaac Siegel	Examiner, Rating Bureau, Insurance Dept., State of New York	
	Prof. Albert W. Whitney	Associate General Manager, National Bureau of Casualty and Surety Underwriters, New York City	1736
	Everett E. Robinson	Manager of Automobile Department, National Bureau of Casualty and Surety Underwriters	
	L. L. Hall	Secretary-Treasurer, National Bureau of Casualty and Surety Underwriters	
	F. Robertson Jones	General Manager, Association of Casualty and Surety Underwriters	1830
	Charles Haugh	Actuary, National Bureau of Casualty and Surety Underwriters	
	P. Tecumseh Sherman	Counsel for Casualty Insurance Companies	
	James A. Beha	Chairman of the Board, International Germanic Trust Company. Formerly Superintendent of Insurance, State of New York	1984
	Marcus Meltzer	Statistician, National Bureau	2061
	Clarence W. Hobbs	Formerly Insurance Commissioner, State of Mass. Representative of the National Convention of Insurance Commissioners	2126
	SPRINGFIELD, MASS.:	Wesley E. Monk	General Counsel of Mass. Mutual Life Insurance Co. Formerly Insurance Commissioner, Commonwealth of Massachusetts	2167
BOSTON, Mass.:	Hon. Merton L. Brown	Commissioner of Insurance, Commonwealth of Massachusetts	2247
	Capt. Geo. A. Parker	Registrar of Motor Vehicles, Commonwealth of Massachusetts	
	Arthur E. Linnell	First Deputy Commissioner of Insurance, Mass.	
	Edmund S. Cogswell	Second Deputy Commissioner of Insurance, Mass.	
	Arthur B. Lines	Actuary, Division of Insurance, Mass.	
	Harold J. Taylor	Counsel, Division of Insurance, Mass.	
	Edgar P. Dougherty	Third Deputy Commissioner of Insurance, Mass.	
	W. N. Magoun	Manager, Mass., A. R. and A. P. Bureau	2320
	W. J. Constable	Secretary, Mass., A. R. and A. P. Bureau	
	R. A. Wheeler	Actuary, Liberty Mutual Insurance Company	2363
	S. Bruce Black	President Liberty Mutual Insurance Company	2364
Gay Gleason	Counsel, Employers' Liability Assurance Corporation	2395	
Frank P. Sargent	Manager, Employers' Liability Assurance Corporation		
Fred L. Reynolds	Claims Department, Employers' Liability Assurance Corporation		

<i>Place</i>	<i>Witness</i>	<i>Occupation</i>	<i>Page</i>
HARTFORD, Con.	Robert J. Sullivan	Vice-President, Travelers' Insurance Company	
	Sanford B. Perkins	Assistant Secretary, Travelers' Insurance Company	2449
	Allan R. Goodale	Assistant Secretary, Travelers' Insurance Company	2449
	Benedict D. Flynn	Secretary, Travelers' Insurance Company	
	Hon. Robbins B. Stoeckel	Commissioner of Motor Vehicles, State of Connecticut, and Associate Professor, Department of Civil Engineering, Yale University	2555
	Hon. Howard P. Dunham	Commissioner of Insurance, State of Connecticut	2610
	William Brosmith	Counsel, Travelers' Insurance Co.	
	WASHINGTON,	Terrence E. Cunneen	Manager, Insurance Department, Chamber of Commerce, U.S. . . . .	2655
Arthur Von Thaden		Assistant Manager, Insurance Department, Chamber of Commerce, U.S.	
Col. Alvin Barber		Manager, Transportation and Communication Department, Chamber of Commerce, U.S.	2702
Charles Stark		Assistant Manager, Transportation and Communication Department, Chamber of Commerce U.S.	
Theodore P. Noyes		Member of A.A.A. Compulsory Automobile Liability Insurance Committee	2754
Ernest N. Smith		Executive and Vice-President, American Automobile Association	
Owen B. Augspurger		Chairman, A.A.A. Compulsory Automobile Liability Insurance Committee	
BALTIMORE, Md.:	Austin J. Lilly	General Counsel, Maryland Casualty Company	2820
	Edward J. Bond, Jr.	Vice-President, Maryland Casualty Co.	
	Joseph F. Matthai	Vice-President, United States Fidelity and Guaranty Company..	

APPENDIX "H"

LIST OF EXHIBITS

Relating to Compulsory Insurance and Financial Responsibility Laws

<i>Number of Exhibit</i>	<i>Exhibit</i>	<i>Page of Record</i>
58	Copy of New York State Financial Responsibility Law	
59	New York State Traffic Law	
60	Forms issued by the New York State Motor Vehicle Department	
61	New York Insurance Law	
62	Preliminary Text, Annual Report Superintendent of Insurance, New York	
63	Four forms of endorsement	
73	Report presenting the views of the Committee of Nine, dated 1925	
74	Final Status of 1929 Legislation for Automobile Liability Security Laws (including six similar reports)	
75	A.A.A. Safety-Responsibility Bill	
76	Address of Thomas P. Henry, President American Automobile Associa- tion, at White Sulphur Springs, October, 1928	
77	Report on Automobile Insurance Legislation by R. Leighton Foster, which embodies a digest of the New York Financial Responsibility Law and the text of the "Macaulay Bill"	
78	Galley proof of Objections to Workmen's Compensation Law as applied to automobile insurance, by Mr. Sherman	
79	Automobile Liability Security Laws	
80	Report of the Joint Legislative Committee of the Senate and Assembly, California, relating to traffic hazards and problems and motor vehicle public liability insurance, January, 1929	
89	Copy of the laws relative to compulsory automobile liability insurance as amended 1929	2259
90	1929 amendments to the Massachusetts Insurance Law, Chapter 166	2260
91	Massachusetts Automobile Manual containing classifications of risk and schedules of premium charges established by the Commissioner of Insurance, effective January 1st, 1930	2260
92	Massachusetts Automobile Liability Statistical Plan, containing rules and code established by the Commissioner of Insurance	2260
93	Massachusetts Automobile Liability Experience for 1927 and 1928, filed by the Massachusetts Rating Bureau with the Insurance Depart- ment, June and July, 1929	2265
94	Report of the Bureau to the Insurance Department as of August 13th, 1929, of the suggested schedule of rates for 1930	2265
95	Proposed rate schedule for automobile liability insurance for 1930, Commonwealth of Massachusetts	2270

<i>Number of Exhibit</i>	<i>Exhibit</i>	<i>Page o Record</i>
96	Tentative rate schedule proposed by Commissioner	2270
97	Volume entitled "Acts and Resolves," passed by the Legislature of Massachusetts during the session of 1929, attention directed particularly to page 531	2292
98	Report of the Judicial Council for 1929 embodying the recommendation that the Stone Plan be engrafted on the Massachusetts Law to cover the problem presented by non-resident motorists	2304
99	Data on motor vehicle accidents furnished by the Registrar of Motor Vehicles for the Commonwealth of Massachusetts	2316
100	Form of application for motor vehicle registration, to which is attached form of certificate with respect to insurance which is required by law	2319
101	Constitution Massachusetts Automobile Rating and Accident Prevention Bureau	2324
104	Letter from Mr. Cogswell addressed to Mr. Foster enclosing copy of statement prepared by Commissioner Monk in 1928	2448
105	Memorandum submitted by Mr. Reynolds	2448
106	Report by Massachusetts Investigating Committee, 1924	
108	Motor Vehicle Law of the State of Connecticut	2472
111	Copy of the last Annual Report of the Commissioner of Motor Vehicles for the State of Connecticut	2581
112	Connecticut Motor Vehicle Laws revised to July 1st, 1929	2585
113	Copy of an address delivered by Colonel Howard P. Dunham at White Sulphur Springs in 1928 (October)	2613
116	Pamphlet issued by the Chamber of Commerce of the United States on Compulsory Automobile Insurance	2664
117	Compulsory Automobile Liability Insurance, Motor Vehicle Conference, January, 1927	2696
118	A Primer on Compulsory Automobile Insurance	2696
119	State Regulation of Motor Vehicle Common Carrier Business	2696
120	1929 addition of Motor Vehicle Conference Committee	2696
121	Report of the First Conference on Street and Highway Safety and Succeeding Reports	2705
122	Basic Regulation Principles, by Col. A. B. Barber	2718
123	Report by the Director of the Division of Vital Statistics	2750
124	Press Comments on the A.A.A. Bill	2786
125	Address by Mr. Augspurger at Columbus, Ohio	2803
126	A brief summary of the high spots of the Automobile Liability Security Laws of various States so far as they relate to the principles of the A.A.A. Bill	2806
128	First report on the Control of Traffic on Roads by the Royal Commission on Transport in July, 1929	2824
129	Minutes of Evidence given on behalf of the Transport and General Workers' Union, The National Safety First Association, Lloyd's, The Accident Offices Association, and the North Yorkshire and South Durham Regional Advisory Committee on Traffic Control before the Royal Commission on Transport on March 21st and 22nd, 1929	2825

<i>Number of Exhibit</i>	<i>Exhibit</i>	<i>Page of Record</i>
131	"Compulsory Insurance of Compensation for injuries by automobile accidents," "Compensation for Automobile Accidents," and "A Criticism of Proposals for Compulsory Motor Vehicle Compensation Insurance," by P. Tecumseh Sherman in November, 1929.	2870
132	Final Redraft of the District of Columbia (A.A.A. Safety Responsibility Bill), 71st Congress, 1929.	2870
134	Copy of Bill No. 67, proposed by Mr. Leopold Macauley, K.C., M.L.A.	3154
135	Address of Mr. Edward C Stone.	3155
136	Statement of the Toronto Board of Trade, dated 18th December 1929	3156
137	Eight points presented by Mr. Daniel J. Coffey.	3165
138	Statement read by Mr. F. W. Wegenest, K.C., representing the County of York Law Association.	3167
139	Written statement by the Commissioner read at the sitting held on the 18th December, 1929.	3183
140	Statement by Ernest M. Lee, the Secretary of the Commission, and copies of the notice calling this hearing and original correspondence	3183
141	Mimeographed copy of statement made by Mr. T. N. Phelan, K.C., on behalf of the Ontario Motor League	3184
142	Memorandum of the Canadian Automobile Underwriters' Association as read by Mr. John B. Laidlaw, Chairman of the Committee.	3185
143	Highway Traffic Act.	3210
144	Summary of Suspensions produced by Mr. J. P. Bickell, for the years 1924 to 1929 inclusive.	3220
145	Form of instruction to examiners and form of application for permit, produced by Mr. J. P. Bickell, Registrar of Motor Vehicles, Province of Ontario.	3230



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PROVINCIAL AUDITOR'S REPORT

1928-29

Prepared pursuant to the provisions of an Order-in-Council dated
the 28th day of October, 1909

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 16



ONTARIO

TORONTO:

Printed and Published by Herbert H. Ball, Printer to the King's Most Excellent Majesty

1930

ROYAL CANADIAN MOUNTED POLICE REPORT

1954

Produced by The United Press Limited



Published by The United Press Limited

1954



TO THE HONOURABLE W. D. ROSS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to Your Honour the Report of the Provincial Auditor pursuant to the provisions of R.S.O. 1927, chap. 25, sec. 13, subsec. 2, of the Audit Act.

Respectfully submitted,

J. D. MONTEITH,
Treasurer of Ontario.

Treasury Department, Ontario,
Toronto, March 1st, 1930.

PROVINCIAL AUDITOR'S OFFICE,
Toronto, March 1st, 1930.

SIR: I have the honour to submit for the information of the Legislative Assembly, pursuant to the provisions of an Order-in-Council dated 28th October, 1909, as provided by R.S.O. 1927, chap. 25, subsection 2 of section 31, and pursuant to the provisions of subsection 2 of section 13, and sections 27 and 28 of the Audit Act:

- (A) Introduction and Miscellaneous Statements.
- (B) Legal Opinion.
- (C) Treasury Board Over Ruling.
- (D) Statement of Special Warrants Issued.
- (E) Statement of Expenditures in Excess of Appropriations.

Respectfully submitted,

G. A. BROWN,
Provincial Auditor.

HON. J. D. MONTEITH,
Treasurer of Ontario.

I N D E X

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Re Crown-Attorney's Fees.....	21
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Re Clifford W. Godfrey.....	27
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A

INTRODUCTION AND
MISCELLANEOUS STATEMENTS

Report of the Provincial Auditor

INTRODUCTION

I have the honour to submit my report for the fiscal year ended October 31st, 1929, pursuant to the provisions of section 13 (2) of the Audit Act, R.S.O. 1927, chap. 25.

PUBLIC ACCOUNTS

The Public Accounts are compiled in much the same form as in previous years with four new additional statements (see pages 8 to 11), which will be of interest to every Honourable Member of the Legislature.

- (A) Provincial Debt and Investment thereof.
- (B) Gross Provincial Debt.
- (C) Net Provincial Debt.
- (D) Sources of Ordinary Revenue.

AUDIT OF REVENUE

List of audits carried on by the Provincial Auditor in respect to Receipts of Revenues forming the Consolidated Revenue Fund and other audits not relating directly to the Receipts or Expenditures of the Province.

Departmental Audit of Receipts.

Provincial Treasurer's Department:

Main Office.

Controller of Revenue's Office:

Corporation Tax.

Amusement Tax.

Luxury Tax.

Land Transfer Tax (in Land Titles and Registry Offices).

Succession Duty.

Board of Censors.

Motion Picture Bureau.

Attorney-General's Department:

Office of Inspector of Legal Offices.

Fire Marshal's Office.

Insurance Department.

Education Department:

Main Office.

Lands and Forests Department:

Main Office and Branches.
Provincial Land Tax.
Crown Lands Agents.

Mines Department:

Main Office.
Mining Recorders (10).
Temiskaming Laboratories.
Draughtsman, North Bay.

Game and Fisheries Department.

Public Works Department.

Highways Department:

Motor Vehicles Branch.
Gasoline Tax.

Department of Health and Labour:

Registrar-General's Branch.
Inspection Training School for Nurses.
Boiler Inspection Branch.
Stationary Engineers' Branch.

Provincial Secretary's Department:

Main Office.
Companies' Branch.
Brokers' Registration Branch.

Agriculture Department:

Main Office and Branches.

King's Printer's Office.

Office of the Legislative Accountant.

Commissions:

Niagara Parks Commission.
Burlington Beach Commission.
Presqui'le Park Commission.
Soldiers' Aid Commission.
Settlers' Loan Commission.
Ontario Athletic Commission.
Mothers' Allowance Commission.
Old Age Pensions Commission.

Provincial Parks:

Algonquin Park.
Rondeau Park.
Quetico Park.
Long Point Park.

Other Audits:

Agricultural Development Board.
Bond Branch *re* Provincial Loans.
Neglected Children's Branch.
Colonization and Immigration Branch.

Institution Audits:

Ontario School for the Deaf—Belleville.
Ontario School for the Blind—Brantford.
Boys' Training School—Bowmanville.
Ontario Hospitals (12).
Ontario Reformatories (3).
Industrial Farms (2).
Institution Industries (4).
Agricultural College and Farm—Guelph.
Ontario Veterinary College—Guelph.
Agricultural School, Kemptville.
Eastern Dairy School—Kingston.
Northern Academy—Monteith.
Experimental Farms (2).
Horticultural Experimental Station—Vineland.
Vimy Ridge Farm—Guelph.
Brighton Cold Storage Plant.
Butter Grading Station—Toronto.
Institution Stores.

Provincial Savings Offices:

Main Office.
Branches (17).

GENERAL REMARKS

The foregoing is a short resume of the work carried on by the Audit Office in addition to the auditing of all expenditures, and it is again my privilege and my desire to acknowledge my appreciation for the most efficient service and hearty co-operation of every member of my staff.

G. A. BROWN,
Provincial Auditor.

Toronto, March 1st, 1930.

STATEMENT SHOWING SOURCES OF ORDINARY REVENUE

Fiscal Year Ending October 31st, 1929

GRANTS, SUBSIDIES AND SUBVENTIONS.....		\$2,905,228 29
Dominion Government—Annual Subsidy, Health, Technical Education and Employment Offices, etc.		
REVENUE DERIVED FROM INDIVIDUALS AND CORPORATIONS RECEIVING THE BENEFIT OF PROVINCIAL SERVICES, SPECIAL PRIVILEGES OR THE USE OF NATURAL RESOURCES AND PROPERTIES AND PROFITS FROM TRADING, ETC.:		
Taxation.....	\$15,118,446 23	
Gasoline, Mines, Lands, Corporations, Race Tracks (betting), Amusements, and Stock Transfers.		
Licenses.....	10,257,920 64	
Motor Vehicles, Liquor Permits, Hunting and Fishing, Insurance, Loan and Trust Companies, Mines, Race Tracks, Theatres, etc.		
Fees.....	2,859,254 73	
Local Registrars, Police Magistrates, Crown Attorneys, etc.; Fire Marshal, Mine Recording, Companies and Brokers, Registration, Examination Fees, etc.; Land Transfers, etc.		
Fines and Penalties.....	150,977 75	
Profits from Trading Activities.....	7,511,000 00	
Liquor Control Board—Profits, Fines, Sale of Confiscated Liquor, etc.		
Succession Duties.....	6,610,381 81	
Natural Resources, Sale of Produce, Maintenance of Patients, etc.....	5,505,444 46	
Interest on Loans—Hydro, Housing, Agriculture and Settlers, etc.....	10,717,077 39	
Miscellaneous.....	149,948 48	
Ontario Gazette, sale of government publications, and casual revenue.		
Refunds of Expenditure.....	1,165,025 59	
Forest Protection, Public Trustee's Office, Savings Offices, Agricultural Development Board, etc.		
		<u>60,045,477 08</u>
RECEIVED FROM MUNICIPALITIES: REFUNDS OF EXPENDITURE:		
Highways Maintenance—Municipal Contribution.....	\$ 345,698 44	
Mothers' Allowances—Municipal Contribution.....	1,098,075 95	
Maintenance of indigent Patients in Institutions.....	155,238 17	
		<u>1,599,012 56</u>
		<u>\$64,549,717 93</u>

STATEMENT OF REVENUE AND EXPENDITURE

For the Fiscal Year Ended October 31st, 1929

RECEIPTS:

Ordinary.....	\$53,832,640 54	
Interest on Loans, etc.....	10,717,077 39	
		<u>\$64,549,717 93</u>
Capital.....	\$3,346,420 32	
		<u>\$67,896,138 25</u>

EXPENDITURE:

Ordinary.....	\$40,458,718 68	
Public Debt—Interest, etc.....	21,448,105 57	
		<u>\$61,906,824 25</u>
Capital.....	\$21,931 773 75	
		<u>83,838,598 00</u>
Surplus of Ordinary Revenue over Ordinary Expenditure for the year.....		<u>2,642,893 68</u>

PROVINCIAL DEBT

Statement Showing Investment Thereof as at October 31st, 1929

FUNDED DEBT:

Stock and Debentures outstanding.....	\$350,563,844	54
Certificates and Annuities.....	1,890,646	66
	<u>\$352,454,491</u>	<u>20</u>
Deduct—Sinking Fund Investments—		
Registered Stocks.....	\$2,375,145	67
Hydro-Electric Power Commission—		
Ontario bonds deposited with Treasury.....	1,171,000	00
	<u>3,546,145</u>	<u>67</u>
Total Funded Debt.....	\$348,908,345	53

UNFUNDED DEBT:

Treasury Bills.....	\$40,940,000	00
Savings Office Deposits.....	22,784,596	03
Special Funds, Accounts Payable and Accrued Interest...	13,110,046	65
	<u>76,834,642</u>	<u>68</u>
Gross Debt.....	\$425,742,988	21

INVESTMENT THEREOF:

Revenue Producing and Realizable Assets—		
Hydro-Electric Power Commission—advances.....	\$164,522,310	62
Less—Sinking Fund Investments deposited.....	1,171,000	00
	<u>\$163,351,310</u>	<u>62</u>
Temiskaming and Northern Ontario Railway—		
advances.....	30,207,934	92
Farm, Housing and Settlers' Loans.....	33,537,454	12
Cash and Accounts Receivable.....	10,469,133	93
	<u>237,565,833</u>	<u>59</u>
Revenue Producing but not Realizable Assets—		
Roads and Highways.....	\$127,813,419	45
Niagara Parks.....	2,028,204	98
Common School Fund—Trust Fund; Ontario and		
Quebec.....	1,479,078	36
	<u>131,320,702</u>	<u>79</u>
Total Revenue Producing Assets.....	\$368,886,536	38
Non-Revenue Producing Assets—		
Provincial buildings and public works.....	\$40,410,713	67
Plant, stores and equipment.....	1,367,434	94
Deferred assets.....	96,840	89
	<u>41,874,989</u>	<u>50</u>
Other Assets—		
Capitalized value of annual subsidy.....	52,852,233	60
Total Assets.....	\$463,613,759	48
Excess of Assets over Liabilities.....	\$ 37,870,771	27

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Amount Advanced to October 31st, 1929

	Hydro System		Central Ontario System		Total	
	\$	c.	\$	c.	\$	c.
Amount advanced on Capital Account to October 31st, 1928.....	145,030,680	86	15,473,235	21	160,503,916	07
Advances during current year.....	13,970,737	00	402,000	00	14,372,737	00
	159,001,417	86	15,875,235	21	174,876,653	07
Less—						
Refund of Capital Advances not required..	299,115	32	216,682	91	515,798	23
Realization on account sale of Peterborough Gas Works.....			470,938	16	470,938	16
Bruton Twp. Limits reassumed by the Province.....			300,000	00	300,000	00
	299,115	32	987,621	07	1,286,736	39
Total advances to date.....	158,702,302	54	14,887,614	14	173,589,916	68
Repayments from Sinking Fund—(Debt Retirement Plan)—						
Fiscal Year 1926.....	4,812,000	00			4,812,000	00
1927.....	1,338,567	00			1,338,567	00
1928.....	1,417,529	45			1,417,529	45
1929.....	1,499,509	61			1,499,509	61
Total repayments to date.....	9,067,606	06			9,067,606	06
Net amount advanced to October 31st, 1929.....	149,634,696	48	14,887,614	14	164,522,310	62
Province of Ontario Bonds representing Sinking Fund investments, deposited as security for repayment of advances.....	1,171,000	00			1,171,000	00

REGISTERED STOCK—SINKING FUNDS

Investment Account as at October 31st 1929

3½% Stock due January 1st, 1946—£422,549-4-10:						
Ontario Registered 3½% Stock due 1946. Par value.....	\$607,960	14				
“ “ 4% “ “ 1947. “	190,175	99				
“ “ 4½% “ “ 1965. “	151,241	64				
British 5% War Loan due, 1929/1947 £29,444-6-11 at cost..	145,152	76				
Bank of Montreal, London, Eng.—Cash uninvested.....	275	47				
					\$1,094,806	00
4% Stock due May 1st, 1947—£317,912-16-4:						
Ontario Registered 3½% Stock due 1946. Par value.....	\$243,262	24				
“ “ 4% “ “ 1947. “	414,839	61				
“ “ 4½% “ “ 1965. “	189,219	42				
British 5% War Loan due 1929/1947—£3,101-7-10 at cost..	15,313	05				
Commonwealth of Australia 5% stock 1945 1975—£22,559-13-1 at cost.....	107,690	64				
Bank of Montreal, London, Eng.—Cash uninvested.....	38	87				
					970,363	83
4½% Stock due January 1st, 1965—£171,454-12-8:						
Ontario Registered 3½% Stock due 1946. Par value.....	\$ 58,580	34				
“ “ 4% “ “ 1947. “	98,087	99				
“ “ 4½% “ “ 1965. “	98,064	00				
British 5% War Loan due 1929/1947—£421-17-10 at cost..	2,079	11				
Commonwealth of Australia 5% Stock, 1945 1975—£11,140-16-11 at cost.....	53,154	50				
Bank of Montreal, London, Eng.—Cash uninvested.....	9	90				
					309,975	84
					\$2,375,145	67

PUBLIC SERVICE SUPERANNUATION FUND

R.S.O. 1927, Cap. 16, Part III

As at October 31st, 1929

Balance at credit of Fund—November 1st, 1928.....				\$2,304,842 46
Contributions to Fund—				
By Employees.....			\$325,668 85	
By Government (Sec. 39).....	\$325,668 85			
Less Refunds (Sec. 36).....	42,117 41			
		\$283,551 44		
For Sheriffs (Sec. 60).....		9,245 66		
Interest—				
On balance to credit of Fund at				
November 1st, 1928.....		115,242 12		
On Employees' Con-				
tributions.....	\$ 7,052 21			
On Government Con-				
tributions.....	7,052 21			
		\$ 14,104 42		
Less interest allowed				
Government on				
payments.....	6,433 74			
			7,670 68	
				415,709 90
				741,378 75
				<u>\$3,046,221 21</u>
Deduct—				
Benefits Paid—				
Allowances to superannuates and beneficiaries.....		\$263,811 69		
Lump sum payments, Sec. 34 and 35.....		13,435 75		
Refunds under Sec. 36.....		42,117 41		
Refunds under Sec. 63.....		6,892 07		
Interest on refunds and lump sum payments.....		8,852 74		
				335,109 66
Balance at Credit of Fund at October 31st, 1929.....				<u>\$2,711,111 55</u>

STATEMENT OF RECEIPTS AND EXPENDITURES

November 1st, 1920, to October 31st, 1929

Year	Receipts		Expenditure		Surplus	
	\$	c.	\$	c.	\$	c.
1921.....	331,412	32	62,709	95	268,702	37
1922.....	406,744	96	111,728	78	295,016	18
1923.....	485,151	01	170,199	39	314,951	62
1924.....	467,864	22	199,815	11	268,049	11
1925.....	466,060	66	212,319	80	253,740	86
1926.....	491,070	84	227,197	06	263,873	78
1927.....	497,250	65	255,432	31	241,818	34
1928.....	696,402	12	297,711	92	398,690	20
1929.....	741,378	75	335,109	66	406,269	09
Total.....	4,583,335	53	1,872,223	98	2,711,111	55

PROVINCE OF ONTARIO SAVINGS OFFICE
Statement Showing Deposits and Investment thereof
as at October 31st, 1929

DEPOSITS BY PUBLIC AT OCTOBER 31ST, 1929	\$ 22,784,596 03
AGRICULTURAL DEVELOPMENT FINANCE ACT—INVESTMENTS—	
Agricultural Development Board—Debentures	\$ 28,138,000 00
Less: Repayments to date	3,788,000 00
	\$ 24,350,000 00
Farm Loans Act—Farm Loan Associations	135,503 45
“ “ “ —Capital Stock in Associations	2,400 00
	\$ 24,487,903 45
Savings Offices—	
Cash on hand and in banks	\$ 739,126 86
Accounts receivable	1,000 00
Fixtures (depreciated value)	42,826 77
	782,953 63
	\$ 25,270,857 08

Statement showing the remuneration paid to Officials in the Parliament Buildings
who received pay from more than one source during
the Fiscal Year 1928-9

Name	Page Pub.Acc.	Amount	Total
PRIME MINISTER'S DEPT.:			
Petley, H.	B 7	\$ c. 1,600 00	
“	C 5	200 00	
			1,800 00
LEGISLATION:			
Brown, R.	C 4	1,600 00	
“	K 13	100 00	
			1,700 00
Dies, Roy.	C 4	1,400 00	
“	C 5	200 00	
			1,600 00
Dymond, A. M.	C 5	5,400 00	
“	D 31	1,000 00	
			6,400 00
Harvey, Wm.	C 6	1,600 00	
“	C 5	250 00	
			1,850 00
ATTORNEY-GENERAL'S DEPT.:			
Coo, W. C.	D 27	2,100 00	
“	D 10	1,277 25	
			3,377 25
Ellis, J. A.	D 27	4,000 00	
“	Q 12	2,000 00	
			6,000 00
Humphries, I. A.	D 8	3,800 00	
“	D 25	958 37	
“	D 10	600 00	
			5,358 37
EDUCATION DEPT.:			
Beneteau, A. J.	F 25	4,600 00	
“	F 30	1,020 00	
“	F 29	250 00	
“	F 29	330 00	
			6,200 00
Campbell, J. D.	F 32	2,533 28	
“	F 25	1,400 00	
“	F 50	300 00	
“	F 29	177 60	
			4,410 88
Clarke, John F.	F 15	1,900 00	
“	F 17	10 00	
			1,910 00

Statement showing the remuneration paid to Officials in the Parliament Buildings who received pay from more than one source during the Fiscal Year 1928-29—Continued

Name	Page Pub. Acc.	Amount	Total
		\$ c.	\$ c.
EDUCATION DEPT.—Continued			
Cowles, J. P.	F 25	4,600 00	
“	F 29	821 00	
			5,421 00
Croskery, R. A.	F 29	4,400 00	
“	F 29	500 00	
			4,900 00
Dandeno, J. B.	F 25	4,000 00	
“	F 23	400 00	
“	F 29	320 60	
			4,720 60
De Laporte, Helen.	F 25	2,300 00	
“	F 29	270 15	
			2,570 15
Hoag, J. P.	F 25	4,600 00	
“	F 29	250 00	
“	F 27	140 00	
			4,990 00
Husband, A. J.	F 45	4,600 00	
“	F 30	135 00	
“	F 29	290 00	
			5,025 00
Karr, W. J.	F 25	5,000 00	
“	F 29	250 00	
“	F 29	673 00	
			5,923 00
Levan, I. M.	F 45	4,600 00	
“	F 29	500 00	
“	F 29	160 00	
			5,260 00
Merchant, F. W.	F 15	6,300 00	
“	F 29	750 00	
			7,050 00
MacDougall, J. B.	F 25	4,200 00	
“	F 29	704 00	
			4,904 00
Mills, G. K.	F 25	4,600 00	
“	F 29	192 00	
			4,792 00
Morgan, S. A.	F 30	3,483 98	
“	F 29	250 00	
			3,733 98
Rogers, G. F.	F 45	4,600 00	
“	F 46	324 00	
“	F 29	990 00	
“	F 29	500 00	
			6,414 00
Rutherford, F. S.	F 49	4,200 00	
“	F 30	30 00	
“	F 50	500 00	
“	F 29	384 00	
			5,114 00
Walker, D.	F 30	833 33	
“	F 39	3,833 29	
“	F 29	500 00	
			5,166 62
Walton, Geo.	F 15	1,900 00	
“	F 15	70 72	
			1,970 72
LANDS AND FORESTS DEPT.:			
Ledger, W. R.	G 5	2,400 00	
“	G 8	100 00	
			2,500 00

Statement showing the remuneration paid to Officials in the Parliament Buildings
who received pay from more than one source during
the Fiscal Year 1928-29—Continued

Name	Page Pub. Acc.	Amount	Total
LANDS AND FORETS DEPT.—Continued			
Rorke, L. V.	G 5	\$ 5,000 00	\$ c.
“	G 15	500 00	
			5,500 00
PUBLIC WORKS DEPT.:			
Bain, Wm.	K 15	1,350 00	
“	K 13	100 00	1,450 00
Bennett, Jno.	K 16	1,600 00	
“	K 13	100 00	1,700 00
Campbell, W. J.	K 15	1,500 00	
“	K 13	100 00	1,600 00
Gould, J.	K 15	1,297 45	
“	K 13	100 00	1,397 45
Lowe, S. W.	K 16	1,050 00	
“	K 13	50 00	1,100 00
Sesxmith, E. M.	K 16	1,600 00	
“	K 13	50 00	1,650 00
HEALTH DEPT.:			
Beck, E. C.	M 10	1,980 00	
“	M 10	90 00	2,070 00
Bell, Dr. J. W.	M 10	548 05	
“	M 10	12 00	560 05
Brydson, L.	M 10	900 00	
“	M 10	146 00	1,046 00
Butterworth, E.	M 10	1,200 00	
“	M 10	385 50	1,585 50
Chew, A. M.	M 10	1,125 00	
“	M 10	38 50	1,163 50
Cogle, J.	M 10	677 85	
“	M 10	51 50	729 35
Crossley, V.	M 10	1,600 00	
“	M 10	26 00	1,626 00
Dawson, J. C.	M 10	233 17	
“	M 10	23 00	256 17
Faskin, J. E.	M 10	2,550 00	
“	M 10	213 00	2,763 00
Fenton, W.	M 10	1,600 00	
“	M 10	224 00	1,824 00
Hollinger, R. W.	M 10	1,500 00	
“	M 10	106 00	1,606 00
Jamieson, Ella.	M 12	1,900 00	
“	F 23	200 00	2,100 00
Jewell, E.	M 10	1,400 00	
“	M 10	225 00	1,625 00

Statement showing the remuneration paid to Officials in the Parliament Buildings
who received pay from more than one source during
the Fiscal Year 1928-29—Continued

Name	Page Pub. Acc.	Amount	Total
HEALTH DEPT.—Continued			
McClure, A. D.....	M 10	\$ c. 1,825 00	\$ c.
“.....	M 10	197 00	
McNabb, Dr. A. L.....	M 10	3,600 00	2,022 00
“.....	M 10	32 00	
Phair, Dr. T. J.....	M 5	4,400 00	3,632 00
“.....	F 23	200 00	
Smith, D. A.....	M 10	326 96	4,600 00
“.....	M 10	18 00	
Ward, M. D.....	M 10	1,400 00	344 96
“.....	M 10	24 00	
			1,424 00
PROVINCIAL TREASURER'S DEPT.:			
Boylen, J. C.....	O 11	2,850 00	
“.....	O 11	500 00	3,350 00
Clark, K. E.....	O 12	1,200 00	
“.....	O 12	42 00	1,242 00
Fraser, Alexander.....	O 13	3,800 00	
“.....	A 2	1,400 00	5,200 00
Norris, J.....	O 12	1,900 00	
“.....	O 12	124 50	2,024 50
Regan, R. T.....	O 8	2,700 00	
“.....	C 4	150 00	2,850 00
PROVINCIAL AUDITOR'S OFFICE:			
Jennings, T. R.....	P 3	4,200 00	
“.....	R 36	600 00	4,800 00
PROVINCIAL SECRETARY'S DEPT.:			
Lavell, Dr. A. E.....	Q 14	3,150 00	
“.....	Q 14	750 00	3,900 00
Semple, A. E.....	Q 8	3,300 00	
“.....	C 5	50 00	3,350 00
AGRICULTURE DEPT.:			
Roadhouse, W. B.....	R 10	5,200 00	
“.....	R 36	800 00	6,000 00

B
LEGAL OPINION

LEGAL OPINION

Re Crown Attorney's Fees

PROVINCIAL AUDITOR'S OFFICE,
Toronto, March 13th, 1929.

Re Game and Fisheries Requisition Number 492.

DEAR SIR:

Where the fees of a Crown-Attorney are commuted is he entitled to any further fees under the Summary Conviction Act such as attached?

T. R. JENNINGS,
Assistant Provincial Auditor.

MR. ED. BAYLY, K.C.,
Deputy Attorney-General,
Buildings.

DEPARTMENT OF ATTORNEY-GENERAL,
Toronto, March 22nd, 1929.

DEAR SIR:

I am in receipt of your note asking an opinion as to the payment of fees for prosecuting Game and Fisheries cases, to W. L. Haight, K.C., Crown Attorney, Parry Sound.

Mr. Haight's fees as Crown Attorney have been commuted, and at the time of the commutation the fees earned by him under the Ontario Temperance Act were calculated in the commutation.

He is, therefore, entitled to collect all fees for summary conviction prosecutions other than under the Liquor Control Act.

The fees payable to Crown Attorneys on summary conviction prosecutions are provided for by regulation under the Crown Attorneys Act, passed the 16th of February, 1928.

Yours faithfully,

E. BAYLEY,
Deputy Attorney-General.

GORDON A. BROWN, ESQ.,
Provincial Auditor,
Buildings.

PROVINCIAL AUDITOR'S OFFICE,
Toronto, March 27th, 1929.

DEAR SIR:

I am in receipt of your letter of 22nd instant in which you have given your opinion that Crown Attorneys who have had their fees commuted are still entitled to collect all fees for summary conviction prosecutions other than under the Liquor Control Act.

Permit me to draw to your attention the provisions of clause 2 in the regulations as authorized under an Order-in-Council, dated February 16th, 1928, which reads as follows:—

“A Crown Attorney, *unless* he is remunerated by salary or has had his fees as Crown Attorney commuted, shall be entitled to charge the following fees for the services performed under clause 1, etc., etc.”

May I ask therefore if there is not a conflict as between the opinion you have given and the provisions of clause 2 of the Regulations, unless your opinion as expressed means, that a Crown Attorney is within his rights in charging the proper fees prescribed in order to show them as forming part of the earnings of his office and are returnable to the Province.

Yours very truly,

G. A. BROWN,
Provincial Auditor.

EDWARD BAYLY, K.C.,
Deputy Attorney-General.

DEPARTMENT OF ATTORNEY-GENERAL,
Toronto 5, April 2nd, 1929.

DEAR MR. BROWN:

I have your letter of March 27th in connection with the account of Mr. W. L. Haight, K.C., rendered to the Game and Fisheries Department.

The services performed by Mr. Haight in the prosecution of these cases are not performed *qua* Crown Attorney. The Deputy Minister of Game and Fisheries informs me that he has never requested Mr. Haight to act in the prosecution of these cases by letter. The cases have all been submitted to Mr. Haight by the Local Inspector. There is no duty cast on the Crown Attorney to prosecute these summary conviction cases unless he is requested in writing so to do by the Minister, Deputy Minister or other officer in charge of the Department of the Government.

Yours faithfully,

E. BAYLY,
Deputy Attorney-General.

GORDON A. BROWN, ESQ.,
Provincial Auditor,
Buildings.

PROVINCIAL AUDITOR'S OFFICE,
Toronto, April 3rd, 1929.

DEAR SIR:

Having regard to Game and Fisheries requisition No. 492, W. L. Haight, \$254.80, may I ask if the Department retained the services of Mr. Haight to prosecute the various cases of infractions against the Fish and Game laws as set out in his account, in his official capacity as Crown Attorney.

Yours very truly,

G. A. BROWN,
Provincial Auditor.

D. McDONALD, ESQ.,
Deputy Minister,
Game and Fisheries Department.

GAME AND FISHERIES DEPARTMENT,
Toronto 2, April 22nd, 1929.

SIR:

I beg to acknowledge receipt of your letter of the 3rd instant *re* our requisition No. 492, W. L. Haight, \$254.80.

In certain cases where violations of the Ontario Game and Fisheries Act have taken place, the Department has considered that such cases are of sufficient importance to warrant the retention of Counsel and in such cases, wherever possible, we make arrangements for the engagement of the local Crown Attorney. We do not consider that the services rendered in these cases are rendered in their official capacity as Crown Attorney and the account rendered by Mr. Haight is to cover such cases where his services have been retained by us.

I have the honour to be, Sir,

Your obedient servant,

D. McDONALD,
Deputy Minister.

G. A. BROWN, ESQ.,
Provincial Auditor,
Buildings.

C

TREASURY BOARD OVER-RULING

5

THE UNIVERSITY OF CHICAGO

TREASURY BOARD OVER-RULING

Re Clifford W. Godfrey

PROVINCIAL AUDITOR'S OFFICE,
Toronto, July 11th, 1929.

DEAR SIR:

I have gone through the file very carefully in respect to the accident sustained by the boy, Clifford W. Godfrey and note that the Deputy Attorney-General advises in his letter of March 25th, 1929, to the Official Guardian that "there is no legal liability against the Government," therefore any settlement for damages by the Department would be by way of a compassionate allowance.

I also note that the Department with the approval of the Honourable the Minister of Public Works has recommended settlement at \$2,000.00 and requested, pursuant to an order of the Honourable Mr. Justice Raney that the said sum of \$2,000.00 be paid into court to the credit of the infant, Clifford W. Godfrey.

Permit me to say that no appropriation would appear to be available for the payment of the above compensation, it would therefore be necessary to have Legislative authority before a cheque might issue.

Departmental file returned herewith.

Yours very truly,

G. A. BROWN,
*Provincial Auditor.*MR. GEO. HOGARTH,
Deputy Minister, Public Works Dept.,
Buildings.

EXECUTIVE COUNCIL OFFICE.

Copy of a Minute of the Treasury Board, dated the 25th of July, A.D., 1929.

A difference having arisen between the Provincial Auditor and the Department of Public Works and Highways, as to the issue of a cheque to Clifford Wellington Godfrey, for Two Thousand dollars (\$2,000.00) to compensate him for injuries sustained when a dynamite cap, taken from Public Works construction, exploded in his hands.

The appropriation with funds available for the above payment is "unforeseen and unprovided," Vote 110, Item 3, and the matter having been referred by the said Department for the determination of the Treasury Board, under the provisions of Clause "c," subsection 1, of Section 13, of The Audit Act, Chap. 25, R.S.O. 1927.

Upon consideration of the correspondence and the facts as set out in the letters submitted by the Minister of Public Works and Highways and the Provincial Auditor, the Board directs that a cheque shall forthwith issue for the amount in question, and be charged to Vote 110, Item 3.

Certified,

C. F. BULMER,
Clerk, Treasury Board.

D
SPECIAL WARRANTS

D
SPECIAL WARRANTS
STATEMENT OF SPECIAL WARRANTS ISSUED DURING THE FISCAL YEAR ENDED OCTOBER 31st, 1929

Date of Warrant	SERVICE	Warrants	Expended 1928-29	Unexpended
	Prime Minister's Department			
	Advertising Tourists' Attractions in Ontario:—			
May 22nd, 1929.....	Balance unexpended, 1927-28.....	\$20,017 13		
July 17th, 1929.....	Warrant.....	50,000 00	\$90,336 64	\$9,680 49
	".....	30,000 00		
	General Advertising—			
	Balance unexpended, 1927-28.....			
	Hydro-Electric Power Commission—			
	Rideau System—			
	Transformer Stations.....	2,338 68	1,100 00	1,238 68
	Rural Distribution.....		40,000 00	
	Transmission Lines.....		35,000 00	
	Warrant.....	78,000 00		
Aug. 14th, 1929.....	Purchase of the M. J. O'Brien, Ltd. power interests on the Mississippi and Madawaska Rivers—			
	Warrant.....	1,800,000 00	1,800,000 00	
Sept. 16th, 1929.....	Erection of a third 110,000-volt transmission circuit between Cameron Falls generating station and Port Arthur—			
	Warrant.....	150,000 00	150,000 00	
Sept. 16th, 1929.....	Purchase of the Harty-O'Connor interests at Chats Falls on the Ottawa River—			
	Warrant.....	275,000 00	275,000 00	
Oct. 9th, 1929.....	Preliminary investigations, surveys and expenses re the purchase of M. J. O'Brien power interests on the Mississippi and Madawaska Rivers—			
	Warrant.....	66,000 00	66,000 00	
Oct. 22nd, 1929.....	Grant towards the expenses of the Young Australian League while in Ontario—			
	Warrant.....	1,207 15	1,207 15	
Aug. 29th, 1929.....				

Oct. 25th, 1929.....	Expenses to England and return of soldiers from Ontario who have been awarded the Victoria Cross— Warrant.....	5,000 00	5,000 00	
Education Department				
Oct. 30th, 1928.....	Assistance, etc., to students attending University of Ottawa Normal School, also students taking academic and professional courses for teachers' certificates— Warrant.....	12,000 00	8,329 95	3,670 05
Nov. 19th, 1928.....	Purchase and distribution of books for the Libraries of the Elementary and Secondary Schools and the Public Libraries of the Province and contingencies in respect to same— Balance unexpended, 1927-28.....			100 00
Jan. 18th, 1929.....	Warrant.....			20,000 00
Jan. 18th, 1929.....	“.....			16,000 00
April 18th, 1929.....	“.....			1,000 00
	Grant to the Principal of the English-French Training School at Embrun, Ontario, for an open-air skating rink for the students— Warrant.....	38,900 00	37,027 75	1,872 25
Nov. 29th, 1928.....		75 00	75 00	
Jan. 18th, 1929.....	Expenses in connection with a meeting of the Modern Language Association of America held in Toronto— Warrant.....	433 30	433 30	
July 31st, 1929.....	Royal College of Dental Surgeons, fourth annual payment due June 30th, 1929, and interest at 4¾ per cent. on unpaid balance of overdraft— Warrant.....	16,425 00	16,425 00	
April 9th, 1929.....	Inspection of Indian Schools, services, travelling expenses and contingencies— Warrant.....	3,500 00	1,309 04	2,190 96
Lands and Forests Department				
	To assist in paying expenses in connection with taking over a right-of-way across Lot 14, Concession A, Township of South Walsingham, and constructing thereon a roadway connecting Long Point Park with road leading into Town of Port Rowan— Balance unexpended, 1927-28.....			1,084 39

SPECIAL WARRANTS—Continued

Date of Warrant	SERVICE		Warrants	Expended 1928-29	Unexpended
May 14th, 1929	<p>Lands and Forests Department—Continued</p> <p>Warrant.....</p> <p>“.....</p> <p>Robert F. Baggett of Redbridge, Ontario, for improvements consisting of building and clearance made by him on Lot 14, Concession 4, Township of Phelps, in error, he having been inadvertently directed to this lot by a land guide employed by the Government—</p>	\$2,000 00	\$13,084 39	\$6,400 38	\$6,684 01
Oct. 9th, 1929		10,000 00	150 00	150 00	
May 21st, 1929	<p>Northern Development Department</p> <p>Costs and expenses incurred in connection with the Northern Development Exhibit at the Canadian National Exhibition, Toronto—</p>		1,600 00	1,504 75	95 25
Sept. 16th, 1929	<p>Mines Department</p> <p>Expenses in connection with exploration, treatment and experiment on deposits of fire clay, silica sand and kaolin, located on the Mattagami River below Smoky Falls—</p>		57 52	57 00	52
June 28th, 1929	<p>Balance unexpended, 1927-28.....</p> <p>John Simard and C. Desaulniers, expenses and costs of forming company, etc., owing to error of Mining Recorder in recording certain claims in a district withdrawn from location, etc.—</p>		1,212 70	1,212 70	
May 8th, 1929	<p>Public Works Department</p> <p>Ontario School for the Deaf, Belleville, equipment, etc.—</p>		4,000 00	2,490 50	1,509 50
Warrant.....					

Public Highways Department					
	Safety Committee of the Department of Public Highways, to cover the cost of their programme of advertising—				
	Balance unexpended, 1927-28.....	66 01			
	Warrant.....	2,500 00			
Dec. 20th, 1928.....	“.....	30,000 00			
April 30th, 1929.....	“.....	15,000 00			
Oct. 9th, 1929.....			47,566 01	40,655 67	6,910 34
Sept. 16th, 1929.....	Marsh Hill United Church, to pay for the cost of rebuilding the church which was destroyed by fire—		2,000 00	2,000 00	
	Warrant.....				
	Health Department				
	Legal Fees—				
	Warrant.....	300 00			
Nov. 29th, 1928.....	“.....	25 87			
Jan. 29th, 1929.....	“.....	126 24			
Aug. 21st, 1929.....	“.....	35 80	487 91	487 91	
Oct. 22nd, 1929.....					
	Labour Department				
	National Labour Council of Toronto, to assist in the convention of the All-Canadian Congress of Labour, held in the City of Toronto during the week beginning Nov. 5th, 1928—				
	Warrant.....		500 00	500 00	
Nov. 29th, 1928.....					
Oct. 22nd, 1929.....	American Federation of Labour, reception committee, to assist in the convention held in the City of Toronto—		1,000 00	1,000 00	
	Warrant.....				
	Provincial Treasurer's Department				
	Agricultural Development Board, for the purchase of debentures, issued under the Agricultural Development Act—				
	Balance unexpended, 1927-28.....	300,000 00			
Dec. 20th, 1928.....	Warrant.....	1,000,000 00			
July 5th, 1929.....	“.....	2,000,000 00	3,300,000 00	3,350,000 00	
April 18th, 1929.....	Ontario Artillery Association, grant—		1,000 00	1,000 00	
	Warrant.....				
April 18th, 1929.....	Ontario Rifle Association, grant—		1,000 00	1,000 00	
	Warrant.....				

SPECIAL WARRANTS—Continued

Date of Warrant	SERVICE		Warrants	Expended 1928-29	Unexpended
Aug. 14th, 1929.....	<p>Provincial Treasurer's Department—Continued Veterans' Reunion Council for payment of a grant to assist in arrangements for Warriors' Day in connection with the Canadian National Exhibition— Warrant.....</p>		\$500 00	\$500 00	
Aug. 14th, 1929.....	<p>Provincial Secretary's Department Ontario Hospital, Kingston, for reimbursing the Village of Portsmouth as proportionate payment for repairing, tarring and sanding of that part of King Street approaching the Hospital— Warrant.....</p>		402 33	402 33	
June 15th, 1929.....	<p>Agriculture Department Expenses, educational work, etc., re eradication of weeds by the use of better seed and other methods— Balance unexpended, 1927-28..... Warrant.....</p>	\$1,071 89 10,000 00	11,071 89	7,570 49	\$3,501 40
Jan. 18th, 1929.....	<p>One-half of the expenses of Inspectors appointed by municipalities under the Corn Borer Act, 1924— Balance unexpended, 1927-28..... Warrant.....</p>	12 58 12,200 00	12,212 58	12,150 03	62 55
Dec. 11th, 1928.....	<p>Expenses, etc., in connection with a free trip to the Royal Winter Fair offered for the ten boys standing highest in each county in Old Ontario and the five boys standing highest in each district in New Ontario— Warrant.....</p>		12,000 00	11,290 66	709 34
Oct. 22nd, 1929.....	<p>British Welcome League for work in operating a reception home in Toronto for the newly arrived immigrants— Warrant.....</p>		1,000 00	1,000 00	

General Miscellaneous				
Dec. 20th, 1928.....	Ontario Division of the Canadian Red Cross Society, grant— Warrant.....	15,000 00	15,000 00	15,000 00
Dec. 20th, 1928.....	Ontario Research Foundation— Warrant.....	200,000 00	200,000 00	200,000 00
April 9th, 1929.....	United Empire Loyalists, grant to assist in celebration held in Desoronto, June, 1929— Warrant.....	1,000 00	1,000 00	1,000 00
April 26th, 1929.....	Ontario Society for Crippled Children, grant— Warrant.....	5,000 00	5,000 00	5,000 00
May 8th, 1929.....	St. John Ambulance Association, grant— Warrant.....	2,000 00	2,000 00	2,000 00
June 20th, 1929.....	Canadian International Films, Ltd., in payment of generators and new electrical equipment, etc., installed in the Motion Picture Plant at Trenton on property owned by the Province of Ontario— Warrant.....	35,000 00	35,000 00	35,000 00
June 20th, 1929.....	Canadian Military Institute, grant— Warrant.....	600 00	600 00	600 00
	Total Special Warrants.....	\$6,218,341 59	\$6,230,216 25	\$38,125 34

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TREASURY BOARD MINUTES

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TREASURY BOARD MINUTES

STATEMENT OF TREASURY BOARD MINUTES ISSUED FOR EXPENDITURES
IN EXCESS OF APPROPRIATIONS DURING THE FISCAL YEAR
ENDED OCTOBER 31st, 1929

Lieutenant-Governor's Office

	Warrant	Expended
Allowance for Contingencies.....	\$1,025 00	\$1,025 00

Prime Minister's Department

Main Office, Contingencies.....	5,000 00	4,839 32
Civil Service Commissioner's Office, Contingencies.....	500 00	441 01
King's Printer's Office, Contingencies.....	1,000 00	798 29
Hydro-Electric Power Commission—		
Distributing Stations.....	93,290 00	93,290 00
Transmission and Distributing Lines, new lines re Musquosh power, etc.....	8,000 00	8,000 00
St. Lawrence and Ottawa Systems, St. Lawrence Rural.....	6,000 00	6,000 00
Central Ontario System, Transformer Stations, Miscellaneous Increases.....	22,000 00	22,000 00
Transmission and Distribution Lines, Rural Distribution... Nipissing System, Developments.....	30,000 00	30,000 00
Northern System, Developments, 5,000 Horsepower at Ear Falls.....	57,000 00	57,000 00
	290,370 00	290,370 00

Legislation

Sessional Writers, etc.....	500 00	290 68
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Attorney-General's Department

Main Office—		
Law Library.....	150 00	144 70
Contingencies.....	1,500 00	1,392 62
General—		
Shorthand Reporters, Contingencies.....	5,000 00	4,487 92
Crown Counsel Prosecutions.....	13,000 00	12,897 43
General Litigation.....	10,000 00	6,336 71
Commissions and Sundry Investigations.....	10,000 00	5,706 03
Revision of Statutes.....	8,781 57	4,781 57
Security Frauds Prevention Act.....	10,000 00	6,298 93
Supreme Court, Contingencies.....	1,500 00	310 17
Administration of Justice—		
General Administration of Justice in Districts.....	20,000 00	14,505 08
Police Magistrates, Services and Expenses.....	10,000 00	9,268 28
Algonia District—		
Salaries of Gaolers, Caretakers, etc.....	1,200 00	730 37
Fuel, Light and Water.....	600 00	600 00
Kenora District, Salaries of Gaolers, Caretakers, etc.....	500 00	311 00
Parry Sound District, Salaries of Gaolers, Caretakers, etc....	900 00	829 50
Thunder Bay District, Salaries of Gaolers, Caretakers, etc....	2,500 00	2,281 73
Fuel, Light and Water.....	2,000 00	966 84
Local Masters of Titles—		
North Bay, Salaries and Expenses.....	375 00	132 39
Cochrane, Salaries and Expenses.....	1,200 00	803 47
Registrars and Local Masters, Districts—		
Forms, Copying and Contingencies.....	500 00	142 54
Registration of Patents.....	2,200 00	1,349 50
Miscellaneous—		
Public Trustees Office—		
Auditors' Fees.....	1,500 00	1,500 00
Contingencies.....	1,500 00	1,363 36

Insurance Department

Contingencies.....	1,500 00	1,332 84
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TREASURY BOARD MINUTES—Continued

Education Department

	Warrant	Expended
Public and Separate Schools—		
Rural, Public and Separate Schools, Counties.....	\$296,518 00	\$177,116 99
Rural, Public and Separate Schools, Districts.....	318,000 00	315,024 03
Assisted Public and Separate Schools, Districts.....	50,000 00	39,864 53
Public, Separate and Continuation Schools, Cadet Corps.....	2,000 00	1,272 35
Kindergarten Schools.....	2,300 00	261 05
Night Schools.....	1,700 00	1,553 88
Agricultural and Horticultural School Boards, Teachers and Inspectors.....	47,000 00	40,604 42
Industrial Arts, Manual Training and Household Science.....	16,500 00	16,467 36
Correspondence Courses.....	1,500 00	1,182 23
Continuation Schools.....	30,000 00	26,325 69
Fifth Classes.....	15,000 00	10,839 37
Spring and Summer Schools.....	20,000 00	17,525 10
Inspection of Schools—		
Separate Schools, Salaries.....	1,200 00	1,200 00
Auxiliary Classes, Grants, Services, Contingencies, etc.....	20,000 00	16,655 38
Travelling and Moving Expenses, Contingencies, etc.....	3,000 00	1,928 30
Departmental Examinations, Examiners.....	20,000 00	19,318 66
Training Schools—		
Grants, Teachers in Rural Public and Separate Schools for Observation Purposes.....	1,000 00	715 00
Grants, Temporary Teachers, Normal and Model Schools re Illness.....	3,300 00	3,296 80
General—Allowances and Travelling Expenses, Returned Soldiers re Courses.....	2,500 00	1,832 00
Normal and Model Schools—		
Toronto, Scrubbing, Cleaning, etc.....	650 00	503 37
Ottawa, Extra Services and Additional Teachers.....	300 00	300 00
London, Expenses of Grounds, etc.....	200 00	180 79
Hamilton, Water.....	100 00	99 95
English-French Training Schools—		
Sandwich, Reference Books, Contingencies, etc.....	1,500 00	197 00
High Schools and Collegiate Institutes, Cadet Corps.....	1,200 00	850 00
Technical Education, Manual Training and Household Science Departments.....	3,000 00	2,120 72
Ontario Training College for Technical Teachers, Critic Teachers, etc.....	100 00	97 00
Miscellaneous, Cost of Litigation.....	30,500 00	30,500 00

Lands and Forests Department

Miscellaneous, Rondeau Provincial Park.....	2,500 00	1,304 13
Forestry Branch, Fire-Ranging.....	450,000 00	427,671 39

Northern Development Department

Colonization Roads—		
Inspection, Roads and Bridges.....	3,000 00	1,377 27
Storage and Insurance.....	50 00	11 20

Mines Department

Main Office, Contingencies.....	18,000 00	9,369 03
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Game and Fisheries Department

Miscellaneous—		
Purchase of and repairs to boats, boathouses, etc.....	6,500 00	4,690 69
Exhibits.....	590 00	581 45

TREASURY BOARD MINUTES—Continued

Public Works Department

	Warrant	Expended
Maintenance and Repairs of Government Buildings—		
Government House—		
Salaries.....	\$1,075 00	\$1,075 00
Water, fuel, light and power.....	300 00	242 78
Furniture and furnishings.....	2,000 00	603 46
Telephone service.....	250 00	247 04
Parliament and Departmental Buildings—		
Electric power and light current and gas.....	9,000 00	8,992 10
Supplies, tools, etc.....	5,000 00	1,893 29
Furniture and furnishings.....	5,000 00	4,890 61
Interior alterations.....	2,500 00	800 52
Painting, outside and inside work.....	700 00	666 23
Telephone service.....	10,000 00	6,967 78
Osgoode Hall—		
Telephone and telegraph service.....	750 00	351 26
General repairs and alterations.....	9,000 00	5,388 43
Painting interior and exterior.....	1,500 00	633 18
Educational Buildings—		
North Bay Normal and Model School.....	3,600 00	2,363 07
Brantford School for the Blind, repairs and incidentals...	15,000 00	14,372 72
Monteith Northern Academy, repairs and incidentals...	2,500 00	847 19
Agricultural Buildings—		
Ontario Agricultural College, repairs and incidentals.....	6,000 00	3,226 54
Eastern Dairy School, Kingston, repairs and incidentals..	3,000 00	1,726 00
Kemptville Agricultural School, repairs and incidentals...	1,500 00	1,343 30
District Buildings—		
Parry Sound, repairs and alterations.....	500 00	486 85
Rainy River, furniture and furnishings.....	1,500 00	815 64
Sudbury, furniture and furnishings.....	350 00	230 15
Temiskaming, furniture and furnishings.....	1,200 00	1,193 34
Salary of Caretaker, New Liskeard.....	37 50	37 50
Thunder Bay, repairs and alterations.....	1,100 00	1,088 69
Furniture and furnishings.....	1,000 00	603 97
Miscellaneous—		
Automobiles, purchase, repairs, etc.....	20,000 00	19,876 93
Services, travelling and other expenses.....	2,500 00	2,151 80
Motion Picture Studio, Trenton—		
Repairs and incidentals.....	1,000 00	480 00
Insurance, including installation of lightning rods.....	10,000 00	9,856 26
110 University Avenue, repairs and alterations.....	1,000 00	655 63
Ontario Government Building, Exhibition Park—		
Repairing and installing exhibits, etc.....	15,000 00	14,988 65
Public Works and Bridges—		
Storage dams.....	7,000 00	6,738 66
Public Buildings—		
Parliament and Departmental Buildings—		
Additional accommodation for gardener.....	2,800 00	2,579 62
Public Institutions Buildings—		
Brockville, laundry building.....	2,265 00	2,265 00
Hamilton, infirmary building.....	30,000 00	29,957 57
Kingston, remodelling Mowat Wing.....	30,000 00	25,856 58
Mimico, water main.....	2,500 00	2,500 00
Psychiatric Hospital, tunnel and steam lines.....	800 00	785 25
Agricultural Buildings—		
Ontario Agricultural College, Guelph, rebuilding barn....	2,500 00	1,311 86
Horticultural Experimental Station, Vineland, greenhouse	200 00	93 28
House for staff.....	250 00	184 14
Kemptville Agricultural School, dairy barn.....	1,500 00	1,093 83
District Buildings—		
Rainy River, registry office.....	475 00	470 97
Temiskaming, lock-up, Englehart.....	5,000 00	4,852 56
Miscellaneous—		
Purchase of property.....	130,839 29	103,291 52

TREASURY BOARD MINUTES—Continued

Public Highways Department

	Warrant	Expended
Motor Vehicles Branch, Contingencies.....	\$25,000 00	\$13,025 12
Miscellaneous—		
Enforcement of Highway Traffic Act.....	500 00	500 00
Enforcement of Motor Vehicles Act.....	95,000 00	94,100 78
Automobile Markers and Supplies.....	6,000 00	269 58

Health Department

Division of Dental Service, Contingencies.....	2,000 00	698 40
Division of Inspection of Training School for Nurses—		
Salaries.....	400 00	400 00
Services and expenses re enforcement of the Registration of Nurses Act.....	4,000 00	3,212 90
Division of Preventable Diseases—		
Contingencies.....	3,000 00	751 49
Outbreaks of Diseases.....	35,000 00	31,310 64
Division of Industrial Hygiene, expenses.....	15,000 00	12,484 96
Division of Sanitary Engineering, salaries.....	800 00	393 75
Laboratories, expenses.....	5,000 00	2,112 97
Division of Public Health Education—		
Salaries.....	175 00	75 00
Services and expenses.....	12,000 00	9,132 54

Labour Department

Apprenticeship Branch, contingencies.....	11,000 00	10,678 07
Boiler Inspection Branch, salaries.....	675 00	637 50
Minimum Wage Board, salaries.....	75 00	75 00

Provincial Treasurer's Department

Board of Censors, contingencies.....	4,100 00	3,683 39
Motion Picture Bureau, contingencies.....	3,500 00	3,416 05
House Post Office, salaries.....	400 00	400 11

Provincial Auditor's Office

Salaries.....	2,775 00	1,404 97
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Provincial Secretary's Department

Children's Aid Branch, enforcing Children's Protection Act.....	8,500 00	8,114 96
Bureau of Municipal Affairs, salaries.....	175 00	175 00
Public Institutions Branch—		
Contingencies.....	11,000 00	7,714 77
Board of Parole, salaries.....	312 50	312 50
General—		
Removal of patients.....	2,000 00	648 03
Printing and stationery for Public Institutions.....	8,000 00	7,460 14
Removal of recovered indigent patients.....	100 00	35 18
Exhibits.....	2,500 00	2,496 24
Hospitals and Charities Branch—		
Salaries.....	275 00	275 00
General Hospitals.....	70,881 20	66,580 35
Orphanages.....	2,113 55	2,113 55
Homes for Incurables.....	32,633 70	32,633 70
Maintenance of Patients in Municipal Sanatoria for Convalescents.....	48,575 25	48,174 00

TREASURY BOARD MINUTES—Continued
Provincial Secretary's Department—Continued

	Warrant	Expended
Public Institutions—		
Ontario Hospitals—		
Brockville, salaries.	\$2,893 75	\$716 42
Cobourg, expenses.	3,000 00	313 49
Hamilton, expenses.	20,000 00	3,182 40
Repairs to buildings, etc.	36,000 00	27,272 46
Kingston, salaries.	13,386 34	13,386 34
Expenses.	27,000 00	10,538 62
London, salaries.	5,741 25	2,155 42
Repairs to buildings, etc.	25,000 00	15,784 06
Mimico, salaries.	5,271 19	5,271 19
Expenses.	15,000 00	7,105 33
Repairs to buildings, etc.	60,000 00	38,396 98
Orillia, salaries.	15,962 53	15,962 53
Expenses.	25,000 00	9,338 57
Repairs to buildings, etc.	13,000 00	7,216 57
Whitby, salaries.	10,359 75	10,359 75
Repairs to buildings, etc.	30,000 00	12,587 36
Woodstock, expenses.	3,000 00	154 53
Repairs to buildings, etc.	7,000 00	4,172 52
Ontario Reformatory, Guelph, expenses.	40,000 00	29,349 86
Ontario Brick and Tile Plant, Mimico, expenses.	8,000 00	4,139 14
Mercer Reformatory, repairs to buildings, etc.	8,000 00	1,465 01
Industrial Farm, Burwash, expenses.	40,000 00	11,211 76
Repairs to buildings, etc.	10,000 00	5,208 65
Industrial Farm, Fort William, expenses.	3,000 00	2,036 85
Repairs to buildings, etc.	6,000 00	4,179 78
Boys' Training School, Bowmanville, salaries.	2,180 42	2,180 42
Expenses.	10,000 00	5,488 67
Repairs to buildings, etc.	11,000 00	10,961 20
Toronto Psychiatric Hospital, repairs to buildings, etc.	4,500 00	2,239 45

Agriculture Department

Agricultural and Horticultural Societies Branch, salaries.	325 00	325 00
Dairy Branch, salaries.	325 00	306 25
Instruction, inspection and grading in connection with dairy products.	14,175 00	13,990 13
Fruit Branch—		
Fruit work, including expenditure under the Fruit Pests Act.	3,050 00	2,975 37
Horticultural Experimental Station, salaries.	550 00	299 96
Agricultural Representatives Branch, expenses attending short courses for winners in competitions.	200 00	142 76
Agricultural Development Act, expenses.	27,675 00	26,976 18
Colonization and Immigration Branch—		
Contingencies.	1,000 00	887 15
Pamphlets, advertising, maps and other expenses.	10,000 00	9,539 56
Headquarters for girl and boy settlers.	5,000 00	4,964 02
Kemptville Agricultural School, salaries and expenses.	7,175 00	6,664 83
Ontario Veterinary College—		
Salaries.	275 00	275 00
Faculty and staff.	8,825 00	8,825 00
Western Ontario Experimental Farm, Ridgetown.	575 00	126 51
Demonstration Farms—		
New Liskeard, maintenance, etc.	3,000 00	2,983 57
Hearst, maintenance, etc.	3,800 00	2,909 54
Ontario Agricultural College—		
Field experiments.	525 00	91 19
Poultry Department.	8,000 00	7,823 09
Horticultural Department.	275 00	45 70
Apicultural Department.	125 00	125 00
Miscellaneous, removal expenses of officials.	800 00	799 81

TREASURY BOARD MINUTES—Continued

General Miscellaneous

	Warrant	Expended
Annuities and bonuses to Indians.....	\$68 00	\$68 00
Compensation for workmen.....	35,000 00	33,383 18
Total Treasury Board Minutes.....	<u>\$3,345,295 79</u>	<u>\$2,808,839 93</u>

Twenty-Fourth Annual Report
OF THE
ONTARIO RAILWAY
AND
MUNICIPAL BOARD

To December 31st, 1929.

PRESENTED TO THE LEGISLATIVE ASSEMBLY.
BY COMMAND

SESSIONAL PAPER No. 17, 1930



TORONTO

Printed and Published by the Printer to the King's Most Excellent Majesty

1930

TO THE HONORABLE WILLIAM DONALD ROSS,
Lieutenant-Governor of the Province of Ontario, in Council.

MAY IT PLEASE YOUR HONOR:

The undersigned has the honour to transmit herewith the Twenty-fourth Report of The Ontario Railway and Municipal Board for the year ending December 31st, 1929.

Respectfully submitted,

WILLIAM H. PRICE,
Attorney-General.

Parliament Buildings,
Toronto.

Parliament Buildings,
Toronto, March 18th, 1930.

DEAR SIR:

RE TWENTY-FOURTH ANNUAL REPORT

I have the honour to send you herewith the Twenty-fourth Annual Report of The Ontario Railway and Municipal Board to December 31st, 1929.

I have the honour to be,

Your obedient servant,
H. C. SMALL,
Secretary.

The Honorable the Attorney-General
Parliament Buildings,
Toronto.

ORGANIZATION

The Organization of The Ontario Railway and Municipal Board of the Province of Ontario is as follows:

C. R. McKeown, K.C.	Chairman.
A. B. Ingram.	Vice-Chairman.
J. A. Ellis.	Commissioner.
H. C. Small.	Secretary.
F. Dagger.	Supervisor of Telephone System.
J. A. McDonald.	Inspector of Telephone Service.
W. C. Coe,	Official Reporter.
H. W. Middlemist,	Consulting Engineer.
W. B. Boyd,	Electric Engineer.
E. A. Crosland,	Inspector of Street and Radial Railways.
G. A. Brown,	Traffic Expert.

TWENTY-FOURTH ANNUAL REPORT

OF THE

Ontario Railway and Municipal Board

to December 31st, 1929

In pursuance of Section 56 of "The Railway and Municipal Board Act" The Ontario Railway and Municipal Board beg leave respectfully to submit their Twenty-fourth Annual Report.

SITTINGS OF THE BOARD

The Board held meetings for the transaction of routine business every juridical day throughout the year. The record of the sessions of the Board and an abstract of the proceedings, together with the Judgments or Opinions of the Board, appear in the Appendix.

In this connection it should be stated that about 80 per cent of the Board's work is not conducted at the formal sessions of the Board shown in the abstract of proceedings above mentioned. This office work of the Board is transacted usually upon written applications and not in the way of formal hearing of parties interested. A classified abstract of the office work of the Board disposed of in the way of formal applications without hearing the parties will be found in the Appendix. In addition to this there is the usual office work of considering and replying to enquiries and other routine correspondence. A short reference is hereafter made, under different sub-headings, of the applications dealt with by the Board 'ex parte' or without a formal hearing of the parties interested.

APPLICATIONS TO THE BOARD

There were 553 formal applications made to the Board in 1929. Of the formal applications all those in which the parties were ready to go to trial have been heard and disposed of, except in a few cases where adjournments were granted to the parties at the request of Counsel or in order to procure further evidence or to obtain reports from experts in connection with technical matters in question.

Some of the formal applications are still standing for trial, as in the more important matters the parties interested are showing an increasing disposition to take advantage of the opportunities afforded them by the Board's rules for obtaining discovery and production, thus to some extent delaying the final dates of the hearing of the applications, but in reality facilitating the final disposition at the hearings of all the matters in question between the parties.

LAW STAMPS

The amount of revenue collected by the Board in Law Stamps in the year 1929 was \$6,935.50. In 1925 the amount collected was \$7,262.00; in 1926, \$5,542.50; in 1927, \$6,688.60, and \$6,167.60 in 1928.

PROVINCIAL RAILWAYS

An alphabetical list (under the names of the railway systems affected) of applications to the Board during 1929 affecting Provincial Railways, is contained in the Appendix of this Report.

Extensions of and improvements to Provincial Railways during 1929, as reported to the Board, will be found in the Appendix (arranged alphabetically) under the names of the several systems reporting.

A tabulation (arranged alphabetically) of Railways under the Board's jurisdiction, will be found in the Appendix. This tabulation shows, for each railway, the lengths of first and second main track, total main track, sidings and turnouts, the total computed as single track, the length under construction, the number of power houses and whether steam or water and whence power obtained.

There will be found in the Appendix an analytical tabulated summary of Accident Reports received by the Board for 1929, also a continuation (up to and inclusive of 1929) of the Board's index to Railway Legislation.

The Appendix also contains tables showing provincial aid to Railways since Confederation, and an index to Legislation, Dominion and Provincial, since 1867, affecting Railways in Ontario.

REPORTS TO THE HOUSE

In pursuance of Rule 61a of the House, the Board made enquiry into and reported upon one financial Bill which was introduced last session into the Legislature. A reference to this Bill so reported will be found in the Appendix.

ANNEXATIONS OF TERRITORY

There are seven applications made in 1929 by urban Municipalities for annexation of additional territory thereto. An alphabetical list of annexation applications is contained in the Appendix.

VALIDATION OF MUNICIPAL DEBENTURES

(Section 304 of "The Municipal Act".)

There were 86 applications to the Board under the above legislation in 1929, involving debentures of a total value of \$5,762,002.06. Acting under the powers conferred by the above legislation the Board was able to grant relief in nearly all of these cases, included in which were more than 52 By-laws affected by irregularities which would otherwise have probably required special Acts of the Legislature to make the debentures valid and saleable.

Municipalities are showing an increasing disposition to have their By-laws and debentures validated under said section 304, even in cases where no irregularities occur requiring the curative powers of the Board thereunder, as they have found that such validation facilitates the marketing of their debentures.

The amount of debentures validated by the Board during 1925 was \$4,544,-784.49; in 1926, \$2,689,309.24; in 1927, \$4,770,868.50; and in 1928, \$4,726,726.17. An alphabetical list of these applications filed in 1929 is given in the Appendix and will be found indexed under the word "Validation".

ARBITRATIONS

In 1929 the Board officiated as Arbitrators in respect of eight different references made to it under "The Highway Improvement Act". Two of these References were under section 77a of "The Highway Improvement Act", as enacted by section 6, Chapter 18, Ontario Statutes, 1928, and were claims made by land owners for damages or compensation in respect of land affected or taken through the exercise of its powers by the Department of Public Highways. The other References were in expropriation proceedings under "The Highway Improvement Act" and "The Public Works Act".

ASSESSMENT APPEALS

There were eleven assessment appeals to the Board during the year 1929. The assessed value of the property affected by these appeals was over \$3,211,-000.00. An alphabetical list of these assessment appeals is contained in the Appendix.

RAILWAY RETURNS

Annual Reports to December 31st, 1929, by Railway Companies under the Board's jurisdiction were received, of which a summarized tabulation has been prepared for publication herein, and will be found in the Appendix. The Board has no means of auditing the reports as received and does not therefore represent or guarantee that the figures taken therefrom are correct or accurate. Heretofore these reports were copied and tabulated as received and published in the Board's Annual Report; this practice was discontinued for the first time in 1924.

ACCIDENTS

A tabulated summary of Accident Reports received by the Board from Provincial Railways during the year 1929 appears in the Appendix and shows that 30 persons were killed and 1017 injured during the year.

In 1925, 17 persons were killed and 666 injured; in 1926, 30 persons were killed and 710 injured; in 1927, 20 persons were killed and 761 injured; and in 1928, 31 persons were killed and 848 injured.

ONTARIO SAFETY LEAGUE

Early in 1913 the members of the Board called together representatives of various organizations which were specially interested in the question of street traffic. Representatives were sent from the Board of Trade, Canadian Manufacturers' Association, City Council, Ontario Motor League, Board of Education,

Separate School Board, Toronto Railway Company, Toronto District Labour Council, Boy Scouts, Team Owners' Association, and many others. Every delegate realized that the question was one that dealt with actual dangers and concerted action must be taken. After numerous conferences the Ontario Safety League was organized on the 17th September, 1913. The League has since done much good and vitally useful work towards lessening the dangers of travel, especially on congested highways.

In addition to its Provincial organization the League has become National in its organization and operations. See summary of the League's 1929 campaign which appears in the Appendix.

PLANS

(Land Subdivisions).

Under "The Planning and Development Act", (Chapter 236, R.S.O., 1927), "The Land Titles Act" (Chapter 158, R.S.O., 1927, section 110), and "The Registry Act" (Chapter 155, R.S.O., 1927, section 80, subsections 14 and 18), the Board considered during the year 53 applications for approval of plans, deeds of conveyance, etc. An alphabetical list of the owners of property in question in these applications will be found in the Appendix.

In 1925, 59 such applications were considered, 44 in 1926, 35 in 1927 and 38 in 1928.

FORMS

The Board has (for distribution to parties interested) the following forms and specifications, namely:

- (1) The Board's Rules of Practice and Procedure and Practice Forms;
- (2) Regulations, Specifications and Forms respecting Railways;
- (3) Standard Specifications for Bridges, Viaducts, Trestles or other structures;
- (4) Pamphlet containing copy of "The Telephone Act", and with information regarding Provincial Telephone Systems, and including
 - (a) Specifications for the construction and equipment of telephone systems;
 - (b) Form of By-law providing for the establishment of a telephone system under Part II of "The Telephone Act";
 - (c) Form of By-law providing for the issue of Debentures to pay for the cost of establishing a Telephone System under Part II of "The Telephone Act";
 - (d) Form of By-law to regulate the management and operation of a Telephone System established under Part II of "The Telephone Act";
 - (e) Form of Annual Report to be furnished to the subscribers to a telephone system established under Part II of "The Telephone Act";
 - (f) Sample form of Annual Report and Balance Sheet for telephone companies;
 - (g) Form of account for use by telephone companies using the "Discount System of Collections";
 - (h) Form of Municipal Debenture—Instalment Plan;
 - (i) Form of Constitution and By-laws for a Telephone Company.

- (5) Forms of Petition praying for the establishment or extension of a telephone system under Part II of "The Telephone Act";
- (6) Forms of By-laws granting to a Telephone Company the right to use the highways of a Township;
- (7) Regulations and specifications for telephone or telegraph wires crossing Railway;
- (8) Form for Return by Municipality operating a Telephone System;
- (9) Form for Return by Company, etc., operating a Telephone System;
- (10) Form for Tariff of Tolls for Telephone System;
- (11) Forms under "The Planning and Development Act", with directions for guidance of Applicants thereunder;
- (12) Forms for submission of a by-law or question to a poll, under "The Municipal Act";
- (13) Form for Money By-law;
- (14) Forms of affidavits in support of applications under section 304 of "The Municipal Act";
- (15) Preliminary Resolution under section 8 of "The Local Improvement Act";
- (16) Forms for Annual Reports by Railway Systems;
- (17) Forms for Reports as to Examination of Motormen;
- (18) Forms for Reports of Accidents by Railway Systems;
- (19) Regulation as to height of car steps;
- (20) Directions for guidance of Applicants under sub-section (2) of section 399 of "The Municipal Act";
- (21) Tariff of the Board's Fees.

EXTENSION OF MUNICIPAL UTILITIES APPROVED UNDER SUBSECTION (2) OF SECTION 399 OF 'THE MUNICIPAL ACT.'

An alphabetical tabulation (under names of Municipalities) of extensions to public utilities made by Municipalities and approved by the Board under the above subsection (2) will be found in the Appendix and is indexed under the word "Approval".

The total of the debenture issue under these By-laws approved in 1929 amounts to \$2,425,528.34. In 1925 the total debenture issue was \$1,347,941.30; in 1926, \$2,378,030.70; in 1927, \$3,588,709.73; and \$1,820,244.87 in 1928. This of course does not cover extensions made under By-laws approved by the rate-payers, but only under By-laws approved by the Board under the above subsection (2).

MISCELLANEOUS MATTERS UNDER THE BOARD'S JURISDICTION

A classified analysis of miscellaneous matters dealt with under the jurisdiction of the Board will be found in the Appendix. These include Annexations, under "The Municipal Act"; Arbitrations; Assessment Appeals, under section 83 of "The Assessment Act"; Financial and other Bills reported to the House under Rule 61a (now 72); Bridges, relief from reconstruction of, under section 469 (9) of "The Municipal Act"; Cemeteries, incorporation of additional land in, etc., under section 43 of "The Cemetery Act"; Detachment of Farm lands from Town or Village, under section 21 of "The Municipal Act"; Extension of Debenture Issue Period under section 296 (11) and (12) of "The Municipal Act";

Extension of time to pass By-laws under section 288 (5) of "The Municipal Act"; Applications under "The (Municipal) Franchises Act" (Section 4, Chapter 240, R.S.O., 1927); Highways (narrow) approved under section 490 (2) of "The Municipal Act"; Highways, Suburban, establishing, closing, etc., under section 12 of "The Planning and Development Act"; Highways, deferred widening of, under section 343 (3) of "The Municipal Act"; Adjustment of Claims, under section 5 of "The Housing Adjustment Act, 1927,"; Incorporations, under section 19 of "The Municipal Act"; Interest Increase By-laws, approval of, under section 300 of "The Municipal Act"; Legislation (special), approval of By-laws under; Local Improvements, Petitions against, under section 8 of "The Local Improvement Act"; Local Improvements, abandonment of part of work, under section 18 of "The Local Improvement Act"; Deviation in course or location of highway, approval By-laws under section 19 of "The Local Improvement Act"; Apportionment of cost of Local Improvement Work, approval of By-laws under section 26 (3) of "The Local Improvement Act"; Northern Fire Relief Act", applications under; "The Railway and Municipal Board Act" (Chapter 225, R.S.O., 1927), applications under; Parks, setting aside part of for athletic purposes, under section 12 of "The Public Parks Act" (Chapter 248, R.S.O., 1927); Restrictions as to use of land or buildings, etc., approved under section 398 of "The Municipal Act"; Sewage and Sewage Disposal Works, applications for directions and compensation in respect of, under section 95 of "The Public Health Act"; Sinking Funds, approval of investment of, under section 317 of "The Municipal Act"; Tax Rate, approval of further debt, under section 306 (2) of "The Municipal Act"; Towns erected into Cities, under section 19 of "The Municipal Act"; Wards, division of Cities, etc., into, under section 44 of "The Municipal Act"; Waterworks Areas and Construction (special legislation); and War Memorials and Patriotic Objects, approval of By-laws for, under section 396 (30) of "The Municipal Act".

PUBLIC UTILITIES

We have the honour to submit analyses of Reports for the year ending December 31st, 1929, upon railway operation in the Province of Ontario under the jurisdiction of the Board.

We also submit tabulated analytical statements prepared from the Annual Reports received from Provincial Railways, and showing the financial position and the operating details of such railways for the year 1929.

H. C. SMALL,
Secretary.

REPORT OF THE SUPERVISOR OF TELEPHONE SYSTEMS FOR THE YEAR 1929.

The following applications under the provisions of The Telephone Act, were dealt with by the Board in 1929:

Under Section 7: For authority to issue debentures for extensions and improvements to telephone systems under Part I.....	2
Under Section 18: For authority to extend municipal telephone systems into unorganized territory.....	1
Under Section 24: For the approval of municipal debenture by-laws to meet the cost of establishing or extending telephone systems.....	8

Under Section 26: For an extension of the period within which to repay the cost of establishing a municipal telephone system.....	1
Under Section 27: For authority to pass municipal debenture by-laws to meet the cost of reconstructing, replacing or altering telephone systems	1
Under Section 28: For authority to issue debentures for the installation of service to non-property owners.....	1
Under Section 30: For authority to meet a portion of debentures payments each year by the issue of new debentures.....	1
Under Section 31: For the approval of the purchase of an existing telephone system by a municipality.....	2
Under Section 80: For the approval of municipal by-laws granting the right to erect poles and wires upon the highways.....	43
Under Section 84: For the right to erect poles and wires upon the highways in unorganized territory.....	3
Under Section 88: For the approval of the by-laws of a telephone company	8
Under Section 93: For the consent to erection of poles and wires parallel with existing lines.....	1
Under Section 94: For an order preventing the duplication of pole leads upon the same highway.....	1
Under Section 95: For an order fixing the terms and conditions for furnishing service.....	3
Under Section 97: For the approval of agreements providing for interchange of service.....	43
Under Section 98: To fix the terms for interchange of service.....	1
Under Section 102: For the approval of the sale of telephone systems....	8
Under Section 103: For authority to increase the charges for telephone service	15
Under Section 105: For authority to furnish free telephone service.....	5
Under Section 110: For authority to expend a portion of the moneys set aside for depreciation upon new construction or extensions or in the purchase of securities.....	6
Under Section 111; For authority to issue stock and bonds.....	5
Total number of applications.....	159

The Board or its Supervisor of Telephone Systems during the year visited sixty-five different points in the province in connection with the foregoing applications.

The continued policy of the Board in endeavoring to secure an amicable settlement of matters in dispute between the applicant and respondent has, with the assistance of the Board's supervisor, proved successful in the majority of such cases.

In addition to the applications and complaints referred to, a vast amount of correspondence relating to telephone matters has been dealt with by the Board's supervisor, through the medium of which much information and assistance has been given to municipalities, companies and other persons interested, and many difficulties which might otherwise have necessitated a formal application and public hearing have been satisfactorily adjusted.

A number of points were visited by the Board's inspector of telephone service during the year for the purpose of investigating complaints made by subscribers, and upon his report and recommendation the Board has been enabled to secure

considerable improvement in the telephone service furnished by the systems coming under his observation.

Owing to the fact that the Annual Report and Financial Statement required to be furnished, pursuant to section 60 of The Telephone Act, to the subscribers to telephone systems operated by municipalities under Part II of the said Act fail to convey a full and accurate statement as to revenue, expenditure, assets and liabilities and to an entire lack of uniformity in such reports, the Board has found it necessary to prescribe a form of Annual Report and Financial Statement to be furnished to the subscribers of all such systems.

During the year two systems, viz :

The Zorra Telephone Company, Limited, Embro, operating 165 telephones,
The Wheatley Telephone Company, Limited, Wheatley, operating 315
telephones.

were purchased by The Bell Telephone Company of Canada and passed out of the jurisdiction of the Board.

Other changes in the ownership of telephone systems were as follows:—

The Municipality of Watt purchased the local telephone system of The Bell Telephone Company of Canada at Utterson, comprising 36 telephones, which will now form a part of the telephone system of that municipality.

The Municipality of the Township of Bruce purchased from The Bell Telephone Company of Canada certain rural telephone lines furnishing service to 88 subscribers, which will now form a part of the telephone system of that municipality.

The Department of Lands and Forests (Forestry Branch) purchased from J. D. Blake the telephone system known as "The Lavant and Denbigh Telephone System", operating 93 telephones in the Townships of Palmerston, Clarendon, Miller, Abinger, Denby, Matawatchan, Griffith, Brougham and Grattan, in the Counties of Frontenac and Lennox and Addington.

New systems were established, as follows:

The Ruby, Telephone Company, Limited, Golden Lake,

Leslie Finnie, Arnprior, (Private System),

The Falconbridge Nickel Mines, Limited, (Private System),

Burwash Telephone Line, Burwash, (Private System).

The number of telephone systems within the jurisdiction of Ontario of which the Board has record is 610, operating approximately 115,000 telephones, and representing an investment of about \$10,400,000.

There are eleven systems owned and operated by municipalities under the provisions of Part I of the Act, viz: the cities of Fort William and Port Arthur, the towns of Cochrane, Dryden, Fort Frances, Kenora, Keewatin, and Rainy River, and the townships of Alberton, Caledon and Hilliard.

One hundred and eighteen systems are now established and operating under Part II of the Act, and furnishing service in two hundred and sixty-seven towns, villages and townships.

Detailed statistics and other information relative to these systems will be found in the appendix to this report, entitled "Telephone Systems, 1930."

FRANCIS DAGGER,
Supervisor of Telephone Systems.

APPENDIX

PROCEDURE FILE A-650

In the Matter of the Claim of the Hamilton & Toronto Sewer Pipe Co. of Hamilton for compensation for certain lands expropriated by the Ontario Department of Public Highways, in the Townships of East and West Flamborough, in the County of Wentworth, and being part of Lots 16, 17 and 25, Plan No. 15.

Jan. 8th. Hearing, pursuant to Appointment, 11—11.45 at Board's Chambers. Adjourned to Monday, 14th January, at 11 A.M. Question of increased value to be argued.

Jan. 14th. Hearing adjourned 'sine die' at request of Counsel.

Jan. 22nd. Hearing continued pursuant to arrangement, 11—11.30 A.M., at Board's Chambers. Counsel agree that advantage (if any) from work may be deducted from compensation for land taken, etc. (Pruce vs. Toronto). Parties may call extra number of expert witnesses—not more than 6 on each side (See Reporter's Notes). If more required either party may apply to Board.

PROCEDURE FILE A-1510

Between:—

Hollinger Consolidated Gold Mines, Ltd.,

Appellant.

—and—

The Corporation of the Township of Tisdale,

Respondent.

(Assessment Appeal).

May 22nd. Order settled.

May 27th. Order issued.

May 23rd, 1929.

ORDER

Upon notice made unto this Board on the 31st day of October, 1928, on behalf of the Appellants by way of Appeal from the Order of His Honour Judge Carron, Judge of the District Court of the District of Temiskaming, dismissing an appeal from the Order of the Court of Revision which confirmed the assessment made by the Assessor of the Township of Tisdale of a Conveyor System the property of the Appellants, and upon reading the proceedings herein and upon hearing Counsel for the Appellants and the Respondents, and Judgment upon the motion having been reserved until the third day of November, 1928,

This board doth order that the assessment of the appealed from Conveyor System of the Appellants be and the same is hereby confirmed and that this appeal be and the same is hereby dismissed with costs to be paid by the Appellants to the Respondents forthwith after taxation thereof.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-1536. (P.548)

In the Matter of section 28 of "The Public Works Act", (Chapter 52, R.S.O. 1927), and

In the Matter of the compensation by the Ontario Department of Public Highways for removal of certain building on East part of Lot 393, Plan 1043, on northwest side of Lake Shore Road, in the Town of New Toronto, owned by W. G. Hay.

June 11th. Statement of Claim (under new Act) filed.

June 19th. Hearing, pursuant to Appointment, 10.30 A.M. to 4.30 P.M. Adjourned to 20th inst., at 10.30 A.M.

June 20th. Hearing continued, 10.30 to 11.30 A.M. Adjourned for argument to 2 P.M., 24th inst. Mr. Cummiford to be produced for cross-examination by Mr. McBrien.

June 26th. Minutes of Settlement filed by Mr. Shaver.

PROCEDURE FILE A-1664

In the Matter of the Application of the Corporation of the City of Kitchener, under section 398 of "The Municipal Act", for approval of its By-law Number 2007 being "a By-law to amend the Zoning Ordinance" as defined by By-law number 1823 (as amended by By-laws 1834 and 1835).

May 29th. Draft Order filed.

May 29th. Order issued.

May 9th, 1928.

ORDER

Upon the application of the said Corporation, and upon reading the copy of each of the said By-laws and the other material filed, and the Board having this day pursuant to Appointment at the Council Chamber in the City of Kitchener heard all parties interested, no one appearing in opposition to the application, although public notice of the hearing was duly given as directed by the Board,

The Board orders, under and in pursuance of the provisions of Section 398 of "The Municipal Act", that the said By-law Number 2007, being "A By-law to amend the Zoning Ordinance" be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-1774

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11745, being a By-law to prohibit the use of land or the erection or use of buildings for any other purpose than that of a detached private residence on either side of Astley Avenue or the north side of Douglas Drive from Glen Road to the east end.

Mar. 11th. Amending By-law 12032 filed.

Mar. 11th. Application granted—City Solicitor to draft Order.

Apr. 3rd. Approved draft Order filed.

Apr. 4th. Order issued.

March 11th, 1929.

ORDER

The application of the Corporation of the City of Toronto, pursuant to section 398, subsection (2b) of "The Municipal Act", being R.S.O., 1927, Chapter 233, for approval of its By-law No. 11745 having come on for hearing by Appointment before this Board on Monday, the 23rd day of July, A.D., 1928, in the presence of a number of property owners affected, it having been proved to the satisfaction of this Board that all Notices required by section 398 subsection (2c) to be sent had been duly sent, and it appearing to this Board that the said By-law would be more just and equitable if certain lands were exempted from its operation, this Board was pleased to direct that the said Application stand over until the said By-law should be reconsidered by the Council of the said Corporation and the said Council having, on the 20th day of February, 1929, passed By-law No. 12032 to amend By-law No. 11745 in accordance with the suggestions of this Board.

The Board orders under and in pursuance of section 398 subsection (2b) of "The Municipal Act", being R.S.O., 1927, Chapter 233, that By-law No. 11745, being intituled "No. 11745. A By-law to prohibit the use of land or the erection or use of buildings for any other purposes than that of a detached private residence on either side of Astley Avenue or the north side of Douglas Drive from Glen Road to the east end", and By-law No. 12032 being intituled "No. 12032. A By-law to amend By-law No. 11745 being 'A By-law to prohibit the use of land or the erection or use of buildings for any other purposes than that of a detached private residence on either side of Astley Avenue or the north side of Douglas Drive from Glen Road to the east end', be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-1789.

Application by the County of Peel, under section 469 (9) of "The Municipal Act", for relief from rebuilding "Eldorado Park" Bridge spanning the Credit River at a point opposite Lot 1 on road allowance between the Third and Fourth Concessions west of Hurontario St., in Township of Chinguacousy.

June 10th. Application for submission of further evidence renewed. Board appoints June 26th, 1929, at 2 P.M., at the Court House, Brampton, for same.

June 24th. Appointment for 26th inst. cancelled.

July 31st. Judgment delivered. Application dismissed.

JUDGMENT OF THE BOARD

In or about the month of June, 1927, the Corporation of the County of Peel, by By-law Number 680, did assume from the Municipal Corporation of the Township of Chinguacousy, a certain bridge spanning the River Credit at Eldorado Park, being opposite Lot No. 1, on the road allowance between the Third and Fourth Concessions west of Hurontario Street, in the Township of Chinguacousy, and prior to the passing of the said By-law the said bridge was destroyed, and the

Municipal Corporation of the County of Peel now asks to be relieved from the necessity to rebuild the said bridge on the grounds

1. That the expense required to rebuild the bridge would be out of all proportion to the convenience or to the benefit that may accrue to the property owners in the immediate vicinity thereof;

2. That the roadway approaching the said bridge bordering on the Credit River would require a large annual expenditure to keep in repair by reason of the encroaching of the river thereon;

3. That there is now another roadway through the Village of Churchville which, though somewhat longer around, would answer the parties to be served by the construction of the said bridge.

The Board has heard the evidence offered by the Municipality of the County of Peel as well as the evidence of those asking that the bridge be reconstructed. This bridge is a necessary construction if the roadway of which the bridge forms a part is to be kept open. This roadway has been travelled by the travelling public for many years. Money has been expended by certain property owners and a school has been erected, known as S.S. No. 21, to which children have been required to attend, and but for the existence of the bridge in question this school-house might have been erected in another location. In addition to this Eldorado Park, a summer resort, has been created in recent years, and to reach this Park the bridge in question, before its destruction, was very much used. Considerable money was expended upon the Park, no doubt relying somewhat on the bridge and roadway in question as a means of access thereto.

To relieve the County from the necessity of rebuilding a bridge as requested would undoubtedly cause a great inconvenience and some considerable financial loss which could hardly be adequately financially compensated.

There is in addition the very peculiar position in which the County of Peel finds itself in this matter. By By-law No. 680, passed in the month of June, 1927, the Municipality of the County of Peel purported to assume as a County Bridge that bridge spanning the River Credit at Eldorado Park and now being considered by this Board. By such assumption the County of Peel undertook to keep the bridge in question in a proper state of repair. The peculiar situation as affecting the bridge now in question is that, according to the application made by the County of Peel to the Railway Board to be relieved from the construction of this bridge it is stated "And whereas the bridge aforesaid has been in a bad state of repair for a number of years and prior to the passing of By-law No. 680 by the Municipal Corporation of the County of Peel the said bridge was destroyed".

Section 459 of "The Municipal Act" states:

(459) "The Council of a County which assumes as a county bridge any bridge within a township, shall, with as little delay as reasonably may be, and at the expense of the county, cause the bridge to be built in a good and substantial manner, and shall maintain and keep the same in repair".

With full knowledge of the facts that the bridge in question had already been destroyed, with the provisions of section 459 of "The Municipal Act" above quoted before them, the Council of the County of Peel saw fit to assume this particular liability, and the Board cannot now see its way clear to relieve them

from the responsibility they so openly assumed. The application therefore must be dismissed.

Dated at Toronto this 31st day of July, A.D., 1929.

(Sgd.) C. R. McKEOWN,
Chairman.

I agree:

(Sgd.) J. A. ELLIS,
Commissioner.

PROCEDURE FILE A-1810

In the matter of the Petition of Mrs. Geo. Reid and others, under section 20 of "The Municipal Act", for annexation to the City of Hamilton of part of the Township of Barton.

Feb. 7th. Application for amendment of Board's Order of Sept. 11th, 1928 (paragraph (b) of clause 4).

Feb. 7th. Application granted.

Feb. 7th. Amending Order issued following form of approved draft filed.

Sept. 16th. Question of maintenance of certain boys committed to Mimico Industrial School, as between the County of Wentworth and the City of Hamilton, spoken to at Sitting of the Board in Council Chamber, Hamilton. Board decides it has not jurisdiction to interpret Agreement between Parties.

Feb. 5th, 1929.

ORDER

Upon the Application of the above mentioned Petitioners, "The Corporation of the City of Hamilton" and "The Corporation of the Township of Barton" to amend the said Order, A.1810, and upon reading the Petition of the Applicants herein filed with the Board, and upon hearing counsel for the said Applicants and the consents filed herein,

This Board doth order and proclaim that the said Order of this Board A-1810, dated the 11th day of September 1928 be and the same is hereby amended by rescinding and striking out paragraph (b) of clause 4 of the said Order, and inserting in lieu thereof the following paragraph namely;—

"4 (b). The Corporation of the Township of Barton shall up to and including the the 30th, day of June, 1929 have the right to collect all such arrears of taxes to the 31st day of December 1928 owing in the said annexed area according to the said special collector's roll, including the right to distrain for non-payment of such arrears or if necessary the right to sell the said lands, if any, for non-payment of such arrears as fully and effectually as if the said lands were still within the limits of the Township of Barton. After the 30th, day of June 1929 the Corporation of the City of Hamilton shall collect any and all such arrears of taxes owing up to the 31st, day of December 1928 and which might still be owing in the said annexed area according to said special collector's roll and shall have the right to distrain for non-payment of such arrears and if necessary, the right to sell the said lands, if any, for non-payment of such arrears as fully as if the said taxes had been assessed

and levied by the Corporation of the City of Hamilton, but the proceeds of the collection of such arrears or any part of the same after deducting therefrom the proper costs and expenses in connection with the collection of the same shall be repaid by the Corporation of the City of Hamilton to the said Corporation of the Township of Barton within six months from the date of collection, provided that the said Corporation of the City of Hamilton shall proceed to collect the said arrears of taxes shown on said special roll, in the same manner as if it had assessed and levied the same, and for that purpose the City Corporation shall have all the rights and powers conferred upon municipalities by the Assessment Act, or other Act in force regarding the collection of arrears of taxes in the annexed area, but the City Corporation shall not be responsible to the Corporation of the Township of Barton for any such arrears of taxes which it may be unable to collect.

This Order shall take effect as of the 31st, day of December 1928.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-1813

In the matter of the Petition of Mrs. Mae McPherson and others, under section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of proposed asphalt roadway on King Street, from Kenilworth Avenue to Ottawa Street, in the said City.

Apr. 9th. Approved draft Order filed.

Apr. 9th. Order issued.

Sept. 11th, 1928.

ORDER

Upon the application of the said Mrs. Mae McPherson, and others, to this Board under Section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of proposed asphalt roadway on King Street, from Kenilworth Avenue to Ottawa Street, in the said City and upon hearing read the Petition herein, the Appointment for Hearing and the evidence adduced and what was alleged by the Appellant and her Counsel and by Counsel for the Corporation of the City of Hamilton, and on consideration of the material filed—

This Board doth order that the property on the said portion of King Street to be specially assessed for the said asphalt roadway, shall be specially assessed for the owners' portion of the cost of an asphalt roadway thirty (30) feet in width, the balance of the cost of the asphalt roadway to be constructed, to be assumed by the said Corporation at large—otherwise the application is hereby dismissed;

And this board doth further order that there shall be no costs of this Application to any Party.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-1843

In the matter of the Petition of A. H. Burrows and others, under section 20 (1) of "The Municipal Act", for annexation to the Town of Timmins of part of the Township of Tisdale, being composed of part of Lot 12, Con. II of said Township—16 3/10th acres more or less, and shown on plan M-60, Temiskaming, District of Cochrane.

Apr. 30th. Hearing, pursuant to Appointment, 9 A.M., Council Chamber, Timmins. Application granted, order to issue as of 1st January, 1929. Township to furnish statement of arrears of taxes to the Town of Timmins—adjustments to be made following method in similar cases.

PROCEDURE FILE A-1849

In the matter of the Petition of J. Ostrowski and others, under section 20 (1) of "The Municipal Act", for annexation to the Town of Timmins of the south-east quarter of the south half of Lot 12, Con. III, Township of Tisdale.

Apr. 30th. Hearing, pursuant to Appointment, 9 A.M., Council Chamber, Town of Timmins. Application granted. Order to date from 1st January, 1929. Statement of arrears of taxes to be given to Town of Timmins by Township of Tisdale. Adjustments to be made as in similar cases.

PROCEDURE FILE A-1867

Application by the Township of North York, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 642—Lawrence Park District.

Mar. 20th. Approved draft Order filed.

Mar. 21st. Order issued.

Nov. 9th, 1928.

ORDER

Upon the application made by Counsel for the Corporation of the Township of North York, on Tuesday, the 2nd day of October, A.D., 1928, in the presence of Counsel for ratepayers upholding and opposing the said By-law and in the presence of T. W. Sloan, a ratepayer appearing in person; and upon hearing Counsel as aforesaid and upon hearing the said T. W. Sloan in person and amendments having been suggested to the said By-law which were duly made by By-law Number 677 of the said Township of North York, a certified copy of which has been duly filed and Judgment on the said Application having been reserved until this day.

The Board orders, under and pursuant to Section 398 of "The Municipal Act", that By-law Number 642 of the Township of North York, being a By-law to regulate the spacing and character of buildings in that portion of the said Township known as Lawrence Park, and to prohibit the use of land or the erection or use of buildings in the said portion of the Township for any purpose except detached private dwellings, as amended by By-law Number 677 of the said Township, be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-1911

In the matter of the Petition of Thos. Histed and others, under section 20 of "The Municipal Act", for annexation to the City of Hamilton of all of Lot 13 in the 4th Concession; and parts of Lots 12, 13, 14 and 15 in the Fourth and Fifth Concessions, and part road allowance between Lots 15 and 16, in the Fourth and Fifth Concessions, of the Township of Barton (West End Area on the Mountain).

Feb. 1st. Resolution of City Council filed.

Feb. 28th. Hearing, pursuant to Appointment, 10.30 to 11 A.M., Council Chamber, Hamilton. Application granted—Order to be drafted by City and submitted to Solicitors for Township and County.

May 2nd. Session of Board, 10.30 A.M. to 1 P.M., at Board's Chambers. Vice-Chairman, Mr. Commissioner Ellis and Secretary settled Minutes and Form of Order. Order settled.

May 6th. Order issued.

Feb. 28th, 1929.

ORDER

Upon the application of the above mentioned Petitioners and upon reading the Petition of the Applicants herein filed with the Board, and the resolution of the Council of the Corporation of the City of Hamilton, passed on the 29th day of January 1929, declaring the expediency of such annexation upon the terms mentioned in said resolution, and upon hearing representatives of the said Petitioners and what was alleged by Counsel on behalf of the Corporation of the City of Hamilton, the Township of Barton, the County of Wentworth, the Board of Education of the City of Hamilton and the Trustees of the School Section No. 3 of the Township of Barton, and reading the consents filed herein, and public notice of the hearing having been given as directed by the Board;

This Board doth Order and Proclaim that the portion of the Township of Barton in the County of Wentworth described as follows:

All and singular that certain parcel or tract of land and premises situate, lying and being in the Township of Barton, in the County of Wentworth, in the Province of Ontario, being composed of all of lot 13 in the Fourth Concession and parts of lots 12, 13, 14 and 15 in the Fourth and Fifth Concessions of the said Township of Barton, and part of the road allowance between lots 15 and 16 in the Fourth and Fifth Concessions of the said Township, all of which may be more particularly described as follows, that is to say;

Commencing at the intersection of the southerly limit of Concession Street with the division line between lots 65 and 66 between Salem Avenue and Harvard Avenue, according to the plan of Mount Royal Subdivisions.

Thence southerly along said division line between lots 65 and 66 and along the rear line or division line between the lots facing on Salem and Harvard Avenues respectively in said Mount Royal sub-division, and continuing southerly in a straight line along the production of said line to a point 100'0" south of the south limit of Queensdale Avenue.

Thence easterly on a line parallel with and distant 100' southerly at right angles from the south limit of Queensdale Avenue to a point in the northerly production of a straight line drawn half-way between East 13th and East 14th Street, and parallel with same.

Thence southerly in a straight line to and along said line drawn halfway between East 13th and East 14th Streets and along the southerly production thereof to a point 100'0" south of the south limit of Fennell Avenue.

Thence westerly along a line parallel with and distant one hundred feet southerly at right angles from the southerly limit of Fennell Avenue to an intersection with the westerly limit of the Road Allowance between lots 14 and 15 in the Fifth Concession of the said Township of Barton.

Thence southerly along the said westerly limit of the road allowance between lots 14 and 15 a distance of five feet (5'0").

Thence westerly along a line parallel with the said southerly limit of Fennell Avenue, and distant one hundred and five feet (105'0") measured southerly at right angles therefrom to an intersection with the westerly limit of the road allowance between lots 15 and 16 in the Fifth Concession of the said Township of Barton.

Thence northerly along the said westerly limit of the Road Allowance between lots 15 and 16 in the Fifth and Fourth Concessions of the said Township to its intersection with the southerly limit of the City of Hamilton.

Thence easterly along the southerly limit of the City of Hamilton in all its winding to the place of beginning, as shown on the plan attached hereto. be and the same is hereby annexed to the City of Hamilton, and the said annexation shall be deemed to have taken effect on and from the 1st day of January 1929, upon and subject to the following terms and conditions namely:—

1. That the taxes, assessments, rents, water, school and other rates in respect of the said annexed District to be levied by the City of Hamilton in respect of the said territory, shall for the year 1929 and thereafter belong to "The Corporation of the City of Hamilton", and "The Board of Education for the City of Hamilton", respectively, and shall be the same, and payable at the same time and in the same manner as taxes, assessments, rents, water, school and other rates, levied and raised from time to time on the property within the old boundaries of the City as they existed on the 1st day of January 1891, and the assessment of the said territory by the City shall, for the year 1929 and thereafter be on the same basis and made at the same time and in the same manner as in the said old boundaries of the City, except that the assessment by the Corporation of the City of Hamilton of the said territory for the year 1929 may be taken by the City Assessors at any time after the date of this Order.

2. All taxes imposed by the Township of Barton upon the annexed district for the year 1928 and any and all arrears of taxes prior thereto owing in the said district shall belong to the Township of Barton.

3. The City of Hamilton shall pay to the Township of Barton on the 1st day of July 1929, the sum of \$1,400.00, in full of all expenditures made and expenses and liabilities incurred by the Township, between the 31st day of December, 1928, and the date of this Order, for and in respect of the said annexed district.

4. The Corporation of the City of Hamilton shall pay to the Trustees of School Section Number 3 of the Township of Barton on the 1st day of July, 1929, the amount of all expenditures made and debts incurred by the said Trustees from the 1st day of January 1929 to the 28th day of February 1929 inclusive, in connection with the schools in the said annexed area.

5. The Corporation of the Township of Barton shall forthwith prepare and furnish to the Corporation of the City of Hamilton a special collector's roll

showing all arrears of taxes or special rates assessed against the lands in the annexed area up to the 31st day of December, 1928, and the persons assessed therefor.

6. The Corporation of the Township of Barton shall up to and including the 31st day of December 1929, have the right to collect all such arrears of taxes to the 31st day of December, 1928, owing in the said annexed area according to the said special collector's roll including the right to distrain for non-payment of such arrears or, if necessary, the right to sell the said lands, if any, for non-payments of such arrears as fully and effectually as if the said lands were still within the limits of the Township of Barton. After the 31st day of December 1929, the Corporation of the City of Hamilton shall collect any and all such arrears of taxes owing up to the 31st day of December 1928, and which might still be owing in the said annexed area according to said collector's roll and shall have the right to distrain for non-payment of such arrears, or, if necessary, the right to sell the said lands, if any, for non-payment of such arrears as fully and effectually as if the said taxes had been assessed and levied by the Corporation of the City of Hamilton, but the proceeds of the collection of such arrears or any part of the same after deducting therefrom the proper costs and expenses in connection with the collection of the same shall be repaid by the Corporation of the City of Hamilton to the Corporation of the Township of Barton quarterly on the 1st days of April, July, October and January, provided that the said Corporation of the City of Hamilton shall proceed to collect the said arrears of taxes shown on said special roll in the same manner as if it had assessed and levied the same and for that purpose the said Corporation shall have all the rights and powers conferred upon municipalities by The Assessment Act or other Act in force regarding the collection of arrears of taxes in the annexed area, but the City Corporation shall not be responsible to the Corporation of the Township of Barton for any such arrears of taxes which it may be unable to collect. When any of the taxes of the Township of Barton against any of the lands in the area hereby annexed are in arrear for a period of four years, such lands, against which the taxes are so in arrear, shall be put up for sale by tax sale.

7. The corporation of the Township of Barton shall indemnify and save harmless the Corporation of the City of Hamilton from all loss, costs, charges and expenses arising from any act or omission of the Township of Barton or their officials or servants in connection with the said Special Roll.

8. The Township of Barton shall at all reasonable times allow the Corporation of the City of Hamilton, its servants and agents access to the Assessment Rolls of the said portion of the said Township of Barton, and to all local improvement by-laws and local improvement assessment rolls, and also all plans, surveys and maps applicable to the said portion of the said Township for the purpose of making copies of the same.

9. All rights, title and interest of the Township of Barton, and the County of Wentworth in and to the lands in the said area including the highways and streets in said area, together with any and all right, title and interest in any franchises or agreements heretofore given or made respecting the said highways and streets shall vest in the Corporation of the City of Hamilton.

10. There shall be an adjustment of the assets and liabilities of the Hydro-Electric Commission of the Township of Barton which shall be subject to the approval of the Hydro-Electric Power Commission of Ontario at the present actual value, and "The Hydro-Electric Power Commission of Ontario" shall be

the sole arbiter as between "The Hydro-Electric Commission of The Township of Barton" and "The Hydro-Electric Commission of the City of Hamilton".

11. Where any work heretofore has been constructed in the said district and such work is defective or insufficient, the Corporation of the City of Hamilton may proceed with the construction of required works under the provisions of the Local Improvement Act notwithstanding the lifetime of the first mentioned work has not expired.

12. The residents of the district to be annexed shall be entitled to water from the Hamilton Waterworks upon the same terms and conditions as the residents of Hamilton.

13. The said annexed territory shall form part of Ward No. 2 of the said City.

14. Notwithstanding anything hereinbefore contained all adjustments pursuant to the provisions of Section 38 of "The Municipal Act", Section 37 of "The Public Schools Act" and "The Housing Adjustment Act, 1927", Statutes of Ontario 17 Geo. V. Chapter 74, shall be made as of the 1st day of January 1929, the date the annexation is deemed to have taken effect.

15. In the adjustment of the assets and liabilities as between the Township of Barton and the City of Hamilton, such adjustment shall be based on the Township assessment for the year 1928, as finally revised, and the Township assessment of the district annexed.—The adjustment between the City and the County to be based upon the Township's equalized assessment—The adjustments between the Township, the County and the School Section respecting the debenture debts to be made as of the 1st January, 1929.

16. This ORDER shall come into force on the 28th day of February, 1929.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-1969

Application by the Township of North York, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law Number 679, as amended by its By-law Number 684, restricting the area bounded on the north by Harley St. and Hartford Road, on the east by Mason Avenue, on the south by the City of Toronto and on the west by Lochiel Street, to private dwellings.

Jan. 28th Hearing continued, pursuant to adjournment, 11 to 11.50 A.M. at Board's Chambers. (Chairman authorized under section 8, Chap. 225, R.S.O.) Chairman will report to Board (See Reporter's Notes) recommending approval of By-law without prejudice to any rights of Mr. Rummell (an objecting owner.)

Mar. 25th. Order settled (By-law No. 712, repealing amending By-law 680) filed.

Apr. 2nd. Order issued.

Mar. 25th, 1929.

ORDER

Upon the application of Counsel for the Township of North York, and upon reading the report of C. R. McKeown, Esquire, K.C., Chairman of the Board, who was authorized to report on the said application pursuant to Section 8 of

"The Railway and Municipal Board Act", and who heard the evidence adduced and what was alleged by Counsel for the Applicant and for the ratepayers upholding and opposing the approval of the said By-law, and it appearing that By-law Number 684 above mentioned had been repealed by By-law Number 712 of the Township of North York and it appearing that subsequent to the passing of the said By-law Number 679 one A. R. K. Bunnell applied to the Supreme Court of Ontario for a mandamus compelling the issue of a permit for the erection of a gasoline service station on Lot 6 on registered plan 2352 and such application is now pending,

1. This Board doth order that By-law Number 679 of the Township of North York as originally passed by Council on the 24th day of October, 1928, be and the same is hereby approved as to the whole of the area affected thereby.

2. This Board doth declare that nothing herein is to be construed to prejudice the rights (if any) which one A. R. K. Bunnell has on the motion pending herein for a mandamus to secure a permit from the Corporation of the Township of North York or from its proper officers in that behalf for the erection of a gasoline service station on Lot 6 on registered plan 2352.

3. And this Board doth not see fit to make any Order as to costs save that the Applicant shall pay \$20.00 for Law Stamps required on this Order.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-1991

Between:—

The Municipal Corporation of the
Township of East York,

Applicant,

—and—

The Municipal Corporation of the
City of Toronto,

Respondent.

Application under section 5 of "The Housing Adjustment Act, 1927. (Chapter 74, R.S.O.) Claim for \$435.47 amount deducted by Respondent for repairs on No. 28 Newmarket Ave.).

Jan. 11th. Order settled and issued.

Dec. 20th, 1928.

ORDER

Upon the application of the above named Applicant, in the presence of the Applicant and Respondent, and upon hearing Counsel for the Applicant and Respondent.

The Board orders that the Respondent is not entitled to deduct from any sum payable to the Applicant under the provisions of "The Housing Adjustment Act, 1927", any sum for repairs to house Number 28 Newmarket Avenue, taken over by the Respondent in pursuance of "The Housing Adjustment Act, 1927".

And the Board orders that its tariff fee of Ten Dollars for Law Stamps on this Order be paid by the Respondent, the Corporation of the City of Toronto.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2000.

Application by the Public Utilities Commission of the City of Port Arthur, under section 7 of "The Telephone Act", for an Order authorizing the Municipal Council to pass a By-law providing for the issue of debentures to an amount not exceeding \$290,000.00 to meet the cost of erecting a central office building for Port Arthur Municipal Telephone System and installing an "Automatic" switching equipment to replace the present "Manual" switchboard.

Jan. 29th. Hearing, pursuant to Appointment, 10 A.M. to 12.30 P.M., Council Chamber, Port Arthur. Board not disposed to approve By-law. Suggested that matter be left to electors to decide by referendum.

PROCEDURE FILE A-2001

Application by the City of Toronto, under section 398, subsection (2b) of "The Municipal Act", for approval of its By-law No. 11877, repealing its Restricted Area By-law No. 8815, in so far as it prevents the use of 100 Roxborough St. West by Dr. W. H. Garveth for the conduct of his medical practice.

Mar. 1st. Amending By-law No. 12006 filed. Application granted.

Mar. 22nd. Approved draft Order filed.

Mar. 27th. Order issued.

Mar. 1st, 1929.

ORDER

The application of the Corporation of the City of Toronto, pursuant to section 398, subsection (2b) of "The Municipal Act", being R.S.O., 1927, Chapter 233, for approval of its By-law No. 11877, having come on for hearing by Appointment before this Board on Thursday, the 27th day of December, A.D., 1928, in the presence of a number of property owners affected, it having been proved to the satisfaction of this Board that all notices required by section 398, subsection (2c) of the aforesaid Municipal Act to be sent had been duly sent, and it appearing that the only opposition to the said By-law came from certain of the said owners who would withdraw their opposition if the By-law were amended by inserting therein after the words "medical practice" the words "provided that the use to be made of such premises shall not extend to the operation or maintenance of a private hospital or sanatorium", this Board was pleased to direct that the said application stand over until the said By-law should be reconsidered by the Council of the said Corporation, and the said Council having on the 11th day of February, 1929, passed By-law No. 12006 to amend By-law No. 11877 by inserting the above words as above set out.

The Board orders, under and in pursuance of section 398, subsection (2b) of "The Municipal Act", being R.S.O., 1927, Chapter 233, that By-law No. 11877 being intituled "No. 11877. A By-law to repeal By-law No. 8815 in so far as "it prevents the use of No. 100 Roxborough Street West by Dr. W. H. Garveth "for the conduct of his medical practice", and By-law No. 12006 being intituled "No. 12006. A By-law to amend By-law No. 11877 being "A By-law to repeal "By-law No. 8815 in so far as it prevents the use of No. 100 Roxborough Street

“West by Dr. W. H. Garveth for the conduct of his medical practice””, be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2027

In the matter of the Petition of Irene Butcher and others, under section 8 of “The Local Improvement Act”, against the paving of a lane known as “Windsor Lane”, in the Township of Scarborough.

Feb. 12th. Hearing, pursuant to Appointment, 11 A.M. to 12.50 P.M., at the Board’s Chambers. Judgment: Township to pay 70%—Frontagers 30%—of cost of work (See Reporter’s Notes).

Feb 23rd. Draft Order filed.

Feb. 23rd. Order issued.

Feb. 12th, 1929.

ORDER

This matter coming on for hearing this day in the presence of all petitioners represented either in person or by their Counsel, R. H. Neil, upon hearing what was alleged by John L. Grogan, Counsel for the Municipal Corporation of the Township of Scarborough and upon reading the material filed and upon hearing what was alleged by all persons present who desired to be heard;

This Board doth order under and in pursuance of the provisions of Section 8, of “The Local Improvement Act” and of all other powers them thereunto enabling, that the proportion of the cost of the said local improvement to be paid by the Corporation shall be seventy per cent thereof and by the abutting properties thirty percent thereof;

And this board doth further order that the construction by-law to be passed by the Council of the said Township pursuant to the advertisement of intention to carry out the work published on the twenty-first day of November, 1928 shall be modified accordingly.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2029

In the matter of the Application of the Corporation of the City of Oshawa, under subsection (2b) of section 398 of “The Municipal Act”, for approval of its By-law Number 1906, amending its Restricted Area By-law Number 1829 (as amended by By-law Number 1836), removing all building and business restrictions on the first 54 feet on the south side, and the first 50 feet on the north side of King Street, lying east of the Ritson Road, in the said City.

Jan. 18th. Hearing, pursuant to Appointment, 10.30 A.M. to 12 M., Council Chamber, City Hall, Oshawa. (Mr. Commissioner Ellis authorized under section 8, Chap. 225, R.S.O.).

Jan. 21st. Report of Mr. Commr. Ellis filed (recommending granting of Application) and adopted.
Jan. 25th. Draft Order filed.
Jan. 25th. Order issued.

REPORT OF MR. COMMISSIONER ELLIS.

I heard this Application at the Council Chamber, in the City of Oshawa, on the 18th inst., as authorized under section 8, Chapter 225, R.S.O.

The portions of lots referred to in this application are on the corners of Ritson Road and King Street. The original By-law 1829, as amended by By-law 1836, declares that King Street lying east of the Ritson Road, and within a distance of 150 feet from the nearest point in the nearest boundary shall be constituted residential area and restricted to private dwellings. An exception was however made in so far as the portions of the two corner lots referred to in the present application are concerned.

There are 72 property owners in the area covered by the original and amending By-laws. The registered Notices of the application were mailed to all of these owners; 2 appeared in opposition to the application but the only objections they raised were of a general character that the entire area should remain restricted under the original and amending By-laws. Under these By-laws the parts of lots mentioned in the application could be used for various kinds of business and the present application was to remove the restrictions entirely so that the properties mentioned could be used for any purpose.

Since the original By-law was passed a Service Station has been erected upon the southwest corner of King Street and Ritson Road. A store has also been erected on the northwest corner of King Street and Ritson Road, making two stores there now. A lumber yard has also been opened on Ritson Road in the rear of some of the lots restricted on King Street. This lumber yard is about two acres in extent.

Whilst the Service Station, store and lumber yard mentioned are not in the area covered by the original By-law, they are immediately adjacent thereto. In my view Ritson Road is more a commercial street than a residential street, and I think that so far as the two corner properties—the subject of the present application—are concerned, they should be considered as being in the Ritson Road area rather than in that of the King Street residential area.

Bylaw Number 1906 was passed unanimously by the City Council.

Under all the circumstances I recommend that By-law Number 1906 be approved.

(Sgd.) J. A. ELLIS,
Commissioner.

Toronto, Jan. 21st, 1929.

Adopted:

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

Jan. 21st, 1929.

ORDER

Upon the application of the said Corporation, and Mr. Commissioner Ellis, duly authorized under Section 8, Chapter 225, R.S.O., having pursuant to Appointment, at the Council Chamber, in the City Hall, in the City of Oshawa, heard Counsel for the Applicant, and the City Engineer, and Mr. E. L. Vickery one of the owners of the property in question in support of the application, and Messrs. A. C. Lycott and Victor Drew in opposition thereto, and upon consideration of the Report of Mr. Commissioner Ellis, dated the 21st day of January, A.D., 1929, which Report has been adopted as the basis of this Order,

The Board orders, under and in pursuance of the provisions of Section 398, subsection (2b) of "The Municipal Act" (Chapter 233, R.S.O.) that the said By-law 1829, intituled "By-law No. 1829 of the City of Oshawa restricting the erection of buildings to that of detached private residences on King Street, East of Ritson Road", as amended by the said By-law Number 1836 and further amended by the said By-law Number 1906, be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2030

Between:—

A. Skeen,

Appellant,

—and—

The Corporation of the City of Toronto,

Respondent.

(Assessment Appeal).

(On property 1515 and 1531 Dundas St. West—\$34,801.).

Jan. 1st. Hearing, pursuant to Appointment, 11 A.M., at Board's Chambers. Appeal dismissed—Board has no jurisdiction. No costs.

PROCEDURE FILE A-2035

Between:—

William A. Thompson,
(Agent for Lessee).....

Appellant,

—and—

The Corporation of the City of Toronto,

Respondent.

(Assessment Appeal).

(Appeal and Cross-Appeal).

Jan. 21st. Hearing, pursuant to Appointment, 11 A.M. to 1 P.M., at Board's Chambers. Adjourned to 29th inst., at 10.30 A.M.

Jan. 29th. Hearing continued, 10.30 A.M. to 12.15 P.M. Hearing concluded. Appeal and Cross-Appeal dismissed. No costs except Law Stamps on Order.

PROCEDURE FILE A-2049

In the matter of the Application of the Corporation of the City of Toronto, under subsection (2b) of section 398 of "The Municipal Act", for approval of Section II of its By-law Number 11938 repealing its By-law Number 11796 in so far as it prevents the establishment of a steam laundry and dry cleaning business on the south side of College Street, between Shaw and Crawford Streets.

Jan. 3rd. Application and material filed.

Jan. 23rd. Hearing, pursuant to Appointment, 11—11.50 A.M., at Board's Chambers. Adjourned to 28th inst., at 11 A.M.

Jan. 28th. Hearing continued, pursuant to adjournment, 11 A.M. to 1.10 P.M. Hearing concluded—Judgment reserved.

Apr. 22nd. Further Hearing, 10.30 A.M. to 12.05 P.M., at Board's Chambers. Hearing concluded—Judgment reserved.

Apr. 26th. Judgment delivered. Application granted.

May 7th. Draft Order filed.

May 13th. Order issued.

JUDGMENT

This was an application made by the City of Toronto, and originally heard by the Board on Wednesday the 23rd January, 1929, adjourned to Monday the 28th January, and finally heard on Monday, the 22nd April.

By-law No. 11796 was passed in September 1928, for the purpose as admitted by all parties, of preventing if possible the establishment of a Hebrew School on Crawford Street, and reads in part as follows:

"1. No person shall use for any purpose except that of a private residence any land abutting on either side of Crawford Street between Dundas Street and College Street (excepting premises fronting on Dundas Street or College Street) or erect or use any building on said land for any purpose except that of a private residence".

Then follows the penalty for violation of the By-law, etc.

For some time before this By-law was passed by the City Council negotiations had been under way for the sale by the City of Toronto to the New Method Laundry Company of a piece of property on the corner of Crawford Street and College Street, fronting on College Street but extending southerly to Sully Crescent, and notwithstanding the fact that these negotiations were being carried on no notice of the intended by-law was served upon the New Method Laundry people before the passing of the By-law, they at that time not being registered owners of the land.

When, however, the New Method Laundry Company came to complete their purchase they found this restricting By-law No. 11796 covering a part of the land agreed to be sold to them by the City of Toronto, and asked for the removal of these restrictions. The City of Toronto then passed By-law Number 11938 on the 11th December, 1928 repealing By-law Number 11796 in so far as it applied to the property on Crawford Street sold to the New Method Laundry Company, and this Board was asked to approve of the said repealing by-law.

Residents of Crawford Street strongly opposed the repealing of the by-law contending that the construction of a laundry at the north end of Crawford Street

would mean that certain laundry trucks and conveyances would be constantly running up and down Crawford Street, and that thereby their restricted property would be reduced in value.

Upon the final hearing of the appeal, however, it appeared that between the date of the passing of the original by-law and the passing of the repealing by-law by the City Council no property on Crawford Street had changed hands, so that no property was dealt with based on the fact that a restricting by-law was on that street before the passing of the repealing by-law.

In addition to this there was filed with the Board a certified copy of the registered plan of the properties being sold by the City of Toronto to the New Method Laundry Company. By this plan it appeared that inasmuch as all the lots which were presumed to be restricted lots faced on Sully Crescent, and that only one of the lots touched on Crawford Street, and that one only by way of a flankage; that therefore the original restricting by-law could only affect part of Lot No. 59 having a flankage of 70 feet on Crawford Street by a frontage of about 18 feet on Sully Crescent. That, therefore, the New Method Laundry Company would be entitled notwithstanding the original restricting by-law to erect its laundry on all the lots between Shaw Street and Crawford Street facing on College Street, and on all the lots between Shaw Street and Crawford Street facing on Sully Crescent, with the exception of the 18 feet being part of Lot No. 59 above referred to.

This would mean that the easterly wall of the laundry could be erected commencing at the southwest corner of Crawford Street and College Street running southerly on Crawford Street 120 feet to the northeast corner of part Lot No. 59, thence making a jog in the building by running westerly 18 feet, thence southerly along the dividing line between Lot No. 58 and part of Lot No. 59, 70 feet to Sully Crescent, and when this situation was explained to those representing the residents of Crawford Street it was agreed by them that if the laundry was to be constructed in that shape it would be more desirable for the residents of Crawford Street that the wall be made straight, and that part of Lot No. 59 be exempted from the working of the by-law.

Counsel for the New Method Laundry Company intimated that the plans for the construction of the new laundry did not show any entrance into the laundry from Crawford Street or from that part of Crawford Street said to be restricted, and intimated at the same time that the rear entrance would be from what is known as Sully Crescent although Sully Crescent appears to have been closed.

Upon this undertaking on the part of counsel for the New Method Laundry Company, and with the consent of the representatives of the property owners that under all the circumstances there would be no advantage in keeping part of Lot No. 59 restricted property if the laundry is to be constructed on the other lots facing on Sully Crescent which the residents had supposed to be restricted by the original by-law, the Board has decided to give its approval to the amending By-law No. 11938 and an Order may issue accordingly.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

Dated at Toronto this
26th Day of April, A.D., 1929.

April 26th, 1929.

ORDER

Upon the application of the Corporation of the City of Toronto, pursuant to "The Municipal Act", 1927, R.S.O., Chapter 233, Section 398, subsection (2b), for an Order approving Section II of By-law 11938 of the said Corporation amending By-law 11796 in so far as it prevents the establishment of a steam laundry on the land described in Section IV of the said By-law No. 11938, upon reading the affidavits of Melville Coniam, Leslie Jackson and William Shea filed, proving service of Notice of Hearings upon the owners of the properties affected, upon hearing the evidence adduced, the representatives of the owners of properties affected, and Counsel for the Applicant and for the New Method Laundry, and this Board having been pleased to direct that this matter stand over until this day,

(1) This Board doth order that Section II of said By-law No. 11938 of the said Corporation be and the same in hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2052

Between:

Caleb Green,

Appellant,

—and—

The Corporation of the City of Ottawa,

Respondent.

(Assessment Appeal).

Jan. 4th. Notice of Appeal filed.

Feb. 15th. Hearing, pursuant to Appointment, 10 to 11 A.M., Council Chamber, Ottawa. Hearing concluded—Appeal dismissed.

July 31st. Order issued.

Feb. 15th, 1929.

ORDER

Notice of appeal herein having been filed with the Board from the decision of His Honour, Judge O'Brien, County Court Judge for the County of Carleton, with reference to the assessment of certain properties of the said Appellant situate on Aylmer Avenue and other Streets in the City of Ottawa, and upon consideration of the said Notice of Appeal and of the portions of the Assessment Roll of the said City in question, and the Board, pursuant to Appointment, having this day, at the Council Chamber, in the City of Ottawa, heard Counsel for the Appellant and for the Respondent herein,

The Board orders, that the said Appeal be and the same is hereby dismissed.

And the Board orders that its tariff fee for Law Stamps herein, Fifteen Dollars, be paid by the Corporation of the City of Ottawa.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2056

In the matter of the Application of The Hamilton, Grimsby & Beamsville Electric Railway Company, under Section 2 of "The Hamilton, Grimsby and Beamsville Electric Railway Company Act, 1928", for approval of its Standard Passenger Tariff, dated Jan. 2nd, 1929, and fixing the maximum fare to be charged between any two points on The Hamilton, Grimsby & Beamsville Electric Railway at two and seven-eighth cents per mile or fraction thereof, providing that no fare be less than seven cents.

Jan. 10th. Application and material filed.

Feb. 5th. Hearing pursuant to Appointment, 10.30 A.M. to 12.30 P.M., at the Court House, Hamilton. Application granted. Applicant's Solicitor to draft Order and have same approved by other Parties.

Feb. 9th. Approved draft Order filed.

Feb. 9th. Order issued.

Feb. 5th 1929.

ORDER

Upon the application of the above named Applicant, at the Sittings of the Board held this day at Hamilton, in the presence of Counsel for the Applicant and for the City of Hamilton and for the Township of Barton, and for the Hamilton Street Railway Company, and upon hearing the evidence adduced on behalf of the Applicant, and upon hearing read the resolution of the Council of the Corporation of the City of Hamilton, filed, and upon hearing Counsel for the Applicant, and for the City of Hamilton and for the Township of Barton—

1. The Board doth hereby declare that the Board approves of the Applicant's said Standard Passenger Tariff, dated January 2nd, 1929, and filed with the Board as O. R. B. No. 6 and doth hereby fix the maximum fare to be charged on the Applicant's Railway at two and seven-eighth cents per mile or fraction thereof, provided that no fare be less than seven cents, and provided further that no greater fare than seven cents be charged for a single trip within the limits of the City of Hamilton as said limits may from time to time exist, and provide further that school children's fares shall remain as at present, until further Order of the Board.

2. The Board doth further order that the Applicant issue transfer tickets to passengers on the Applicant's Railway requiring same, good for a continuous journey, if used on first car leaving transfer point, on the lines of the Hamilton Street Railway to any part of the City of Hamilton, free of charge, and that the Hamilton Street Railway Company issue transfer tickets to passengers on the Hamilton Street Railway, requiring same, good for a continuous journey, if used on first car leaving transfer point, on the Applicant's Railway within the limits of the City of Hamilton as they may from time to time exist, also free of charge.

3. And the Board doth further order that the Applicant shall pay all fees payable in respect of this Order.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2061

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law 11952—Huron Street, between Bloor and Dupont Streets, to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M. pending consideration by City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12154 filed. Application granted. By-law No. 11952 approved as amended. City Solicitor to draft Order.

May 11th. Draft Order filed.

May 11th. Order issued.

Apr. 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11952 having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12154 to amend By-law 11952 aforesaid, and said By-law Number 12154 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended,

The Board orders that the said By-law Number 11952, being intituled "Number 11952, a By-law to restrict to use for private residences only land and buildings on Huron Street, between Bloor and Dupont Streets", and By-law Number 12154 being intituled "Number 12154 a By-law to amend By-law Number 11952 restricting to use for private residences only land and buildings on Huron Street, between Bloor and Dupont Streets", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2062

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11953—Brunswick Avenue, between Bloor and Dupont Streets, to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12155 filed. Application granted. By-law No. 11953 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order issued.

Apr. 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11953, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12155 to amend By-law 11953 aforesaid and said By-law Number 12155 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little, if any, opposition to the approval of the said By-law as so amended,

The Board orders that the said By-law Number 11953, being intituled "No. 11953. A By-law to restrict to use for private residences only land and buildings on Brunswick Avenue, between Bloor and Dupont Streets", and By-law Number 12155 being intituled "Number 12155. A By-law to amend By-law Number 11953 restricting to use for private residences only land and buildings on Brunswick Avenue, between Bloor and Dupont Streets", be and the same are hereby approved,

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2063

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11954—Dalton Road between Bloor Street and Lowther Avenue, to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law 12156 filed. Application granted. By-law No. 11954 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

Apr. 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11954, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12156 to amend By-law 11954 aforesaid and said By-law Number 12156 having also been duly laid before this Board for approval, upon considering the said By-law and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little, if any, opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11954 being intituled "No. 11954. A By-law to restrict to use for private residences only land and buildings on Dalton Road, between Bloor Street and Lowther Avenue", and By-law Number 12156, being intituled "Number 12156. A By-law "to amend By-law Number 11954 restricting to use for private residences only land and buildings on Dalton Road, between Bloor Street and Lowther Avenue", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2064

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11955—Kendal Avenue, between Spadina Road and Dupont Street, to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law 12157 filed. Adjourned (pending poll) to Friday, May 3rd, at 10.30 A.M.

May 3rd. Hearing continued, 10.30—11 A.M. Application granted. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

May 3rd, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11955, having come on for hearing by Appointment before this Board on the 26th day of February, 1929, on which occasion, considerable op-

position to the said approval having become apparent, the Board was pleased to adjourn the said Hearing until the 24th day of April, 1929, on which latter date, it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12157 to amend By-law Number 11955, and said By-law Number 12157 having also been duly laid before this Board for approval, the Board was pleased to further enlarge said hearing until the 3rd of May, 1929, and the same coming on again this day in the presence of a number of property owners affected, and upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected.

The Board orders that the said By-law Number 11955, being intituled "No. 11955. A By-law to restrict to use for private residences only land and buildings on Kendal Avenue, between Spadina Road and Dupont Street", and By-law Number 12157, being intituled "No. 12157. A By-law to amend By-law Number 11955 restricting to use for private residences only land and buildings on Kendal Avenue, between Spadina Road and Dupont Street", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2065

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11956—Walmer Road, between Bernard Avenue and Dupont Street—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12158 filed. Application granted. By-law No. 11956 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

Apr. 24th, 1929.

ORDER

The application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11956 having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said Hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had, on the 22nd day of April, 1929, passed By-law Number 12158 to amend By-law 11956 aforesaid, and said By-law Number 12158 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected,

The Board orders that the said By-law Number 11956 being intituled "Number 11956. A By-law to restrict to use for private residences only land and buildings on Walmer Road, between Bernard Avenue and Dupont Street", and By-law Number 12158, being intituled "Number 12158. A By-law to amend By-law Number 11956 restricting to use for private residences only land and buildings on Walmer Road, between Bernard Avenue and Dupont Street", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2066

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11957—Spadina Road, between Bloor and Dupont Streets—to private residences.

Jan. 14th. Application and material filed.

Feb. 22nd. Objection by Miss I. J. Christie filed.

Feb. 26th. Hearing pursuant to Appointment 11 to 11.10 A.M. Adjourned to Tuesday, 19th March, 1929, at 10 A.M.

Mar. 9th. Hearing continued, 10 to 10.15 A.M. Adjourned to 24th April, 1929, at 10 A.M., at request of Counsel.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12159 filed. Application granted. By-law No. 11957 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

Apr. 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11957 having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 19th day of March, 1929, on which latter date the Board was pleased further to enlarge the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12159 to amend By-law 11957 aforesaid, and said By-law Number 12159 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended,

The Board orders that the said By-law Number 11957, being intituled "No. 11957. A By-law to restrict to use for private residences only land and buildings on Spadina Road, between Bloor and Dupont Streets", and By-law Number 12159

being intituled "No. 12159. A By-law to amend By-law Number 11957 restricting to use for private residences only land and buildings on Spadina Road between Bloor and Dupont Streets", be and the same are hereby approved.

Chairman.

(Seal)

(Sgd.) C. R. McKEOWN,

PROCEDURE FILE A-2067

Application of the Corporation of the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11958—Madison Avenue, between Bloor and Dupont Streets—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12160 filed. Application granted. By-law No. 11958 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11958, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12160 to amend By-law 11958 aforesaid, and said By-law Number 12160 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11958 being intituled "No. 11958. A By-law to restrict to use for private residences only land and buildings on Madison Avenue, between Bloor and Dupont Streets", and By-law Number 12160 being intituled "Number 12160. A By-law to amend By-law No. 11958 restricting to use for private residences only land and buildings on Madison Avenue, between Bloor and Dupont Streets", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2068

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11959—Bedford Road, between Bernard Avenue and Davenport Road—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12161 filed. Application granted. By-law No. 11959 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11959, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12161 to amend By-law 11959 aforesaid, and said By-law Number 12161 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any, opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11959 being intituled "No. 11959. A By-law to restrict to use for private residences only land and buildings on Bedford Road, between Bernard Avenue and Davenport Road", and By-law Number 12161 being intituled "Number 12161. A By-law to amend By-law Number 11959 restricting to use for private residences only land and buildings on Bedford Road, between Bernard Avenue and Davenport Road", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2069

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11960—Admiral Road, between Lowther Avenue and St. George Street—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12162 filed. Application granted. By-law No. 11960 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11960, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12162 to amend By-law 11960 aforesaid, and said By-law Number 12162 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11960 being intituled "No. 11960. A By-law to restrict to use for private residences only land and buildings on Admiral Road, between Lowther Avenue and St. George Street", and By-law Number 12162 being intituled "No. 12161. A By-law to amend By-law Number 11960 restricting to use for private residences only land and buildings on Admiral Road between Lowther Avenue and St. George Street", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2070

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11961—Wells Street, between Howland and Kendal Avenues,—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12163 filed. Application granted. By-law No. 11961 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11961, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming

on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12163 to amend By-law 11961 aforesaid, and said By-law Number 12163 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11961 being intituled "No. 11961. A By-law to restrict to use for private residences only land and buildings on Wells Street, between Howland and Kendal Avenues", and By-law Number 12163, being intituled "Number 12163. A By-law to amend By-law Number 11961 restricting to use for private residences only land and buildings on Wells Street, between Howland and Kendal Avenues", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2071

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11962—Bernard Avenue from Brunswick Avenue to Bedford Road—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12164 filed. Application granted. By-law No. 11962 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11962, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12164 to amend By-law 11962 aforesaid, and said By-law Number 12164 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11962 being intituled "No. 11962. A By-law to restrict to use for private residences only land and buildings on Bernard Avenue from Brunswick Avenue to Bedford Road", and By-law Number 12164 being intituled "No. 12164. A By-law to amend By-law Number 11962 restricting to use for private residences only land and buildings on Bernard Avenue from Brunswick Avenue to Bedford Road", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2072

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law 11963—Tranby Avenue, between Bedford Road and Avenue Road,—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12166 filed. Application granted. By-law No. 11963 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11963, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12166 to amend By-law 11963 aforesaid, and said By-law Number 12166 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected.

The Board orders that the said By-law Number 11963 being intituled "No. 11963. A By-law to restrict to use for private residences only land and buildings on Tranby Avenue, between Bedford Road and Avenue Road", and By-law Number 12166 being intituled "Number 12166. A By-law to amend By-law Number 11963 and restricting to use for private residences only land and buildings on Tranby Avenue, between Bedford Road and Avenue Road", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2073

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law 11964—Boswell Avenue, between Bedford Road and Avenue Road—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12167 filed. Application granted. By-law No. 11964 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April. 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11964, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12167 to amend By-law 11964 aforesaid, and said By-law Number 12167 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected.

The Board orders that the said By-law Number 11964 being intituled "No. 11964. A By-law to restrict to use for private residences only land and buildings on Boswell Avenue, between Bedford Road and Avenue Road", and By-law Number 12167, being intituled "No. 12167. A By-law to amend By-law Number 11964, restricting to use for private residences only land and buildings on Boswell Avenue, between Bedford Road and Avenue Road", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2074

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11965—Elgin Avenue, between Bedford Road and Avenue Road—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by the City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12168 filed. Application granted. By-law No. 11965 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11965, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12168 to amend By-law 11965 aforesaid, and said By-law Number 12168 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11965 being intituled "No. 11965. A By-law to restrict to use for private residences only land and buildings on Elgin Avenue, between Bedford Road and Avenue Road", and By-law Number 12168, being intituled "No. 12168. A By-law to amend By-law Number 11965 restricting to use for private residents only land and buildings on Elgin Avenue, between Bedford Road and Avenue Road", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2075

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 11966—Howland Avenue, between Bloor Street and Dupont Street—to private residences.

Jan. 14th. Application and material filed.

Feb. 26th. Hearing, pursuant to Appointment, 11 A.M. to 12 Md. Adjourned to 24th April, 1929, at 10 A.M., pending consideration by City Council.

Apr. 24th. Hearing continued, 10 to 11 A.M. Amending By-law No. 12165 filed. Application granted. By-law No. 11966 approved as amended. City Solicitor to draft Order.

May 6th. Draft Order filed.

May 11th. Order.

April, 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 11966, having come on for hearing by appointment before this Board on the 26th day of February, 1929, on which occasion, considerable opposition to the said approval having become apparent, the Board was pleased to adjourn the said hearing until the 24th day of April, 1929, and the same coming on again this day in the presence of a number of property owners affected, when it having been pointed out to the Board that the Council of the Corporation had on the 22nd day of April, 1929, passed By-law Number 12165 to amend By-law 11966 aforesaid, and said By-law Number 12165 having also been duly laid before this Board for approval, upon considering the said By-laws and upon hearing what was alleged by or on behalf of all parties affected, and it appearing that there was little if any opposition to the approval of the said By-law as so amended.

The Board orders that the said By-law Number 11966 being intituled "No. 11966. A By-law to restrict to use for private residences only land and buildings on Howland Avenue, between Bloor and Dupont Streets", and By-law Number 12165, being intituled "Number 12165. A By-law to amend By-law Number 11966 restricting to use for private residence only land and buildings on Howland Avenue, between Bloor and Dupont Streets", be and the same are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2091

Application by the Town of Ford City, under section 19, Chapter 233, R.S.O., for erection of the said Town into a City.

Jan. 30th. Application (Petition), Plan, etc. filed.

Mar. 5th. Hearing, pursuant to Appointment, 10 A.M. to 12 Md. at Council Chambers, Ford City. Application granted. Name of new City to be East Windsor, to take effect 1st June 1929, at 12 Noon. City to be divided into three Wards, three Aldermen in each Ward. Nomination to be at 7 P.M., 1st June, 1929. Election 8th June, 1929. J. F. Foster, present Clerk of Town of Ford City, to be Returning Officer. Applicant's Solicitor to draft Order and Submit to Solicitors for County of Essex and Public School Board (respectively) for approval.

Apr. 8th. Approved draft Order filed.

Apr. 12th. Order issued.

Mar. 5th, 1929.

ORDER

Whereas it is provided by Section 19 of "The Municipal Act", Revised Statutes of Ontario, Chapter 233, that the said Board may erect a Town having a population of not less than Fifteen thousand into a City and declare the name which it is to bear,

And whereas the Corporation of the Town of Ford City in the County of Essex and Province of Ontario has applied to the said Board for the erection of the said Town into a City.

And whereas the said Corporation of the Town of Ford City has shown by the Affidavit of the Clerk of the said Town and upon oral evidence, and to the satisfaction of the Board, that the population of the said Municipality according to the last Municipal enumeration by the Assessor of the said Municipality, which is the latest census or enumeration in the premises, is Fifteen Thousand One Hundred and Five, and the said Town is divided into three Wards, each having a population of over two thousand,

And whereas notice of the application by the said Corporation of the Town of Ford City for the erection of the town into a City has been duly published as required by the said Act at least once a week for three months prior to the making of such applications, as appears from the evidence submitted.

THE BOARD THEREFORE ORDERS AND PROCLAIMS:—

1. That the Town of Ford City be and the same is hereby erected into and incorporated as a City under the name of "EAST WINDSOR", and having the same boundaries as the present Town of Ford City.

2. That the City shall be divided into three wards, each of which as aforesaid has a population of not less than two thousand, which shall be numbered from One (1) to Three (3) respectively; and described as follows:—

WARD NUMBER ONE

Comprising all that territory bounded on the west by the westerly limits of the Corporation, on the north, northerly limits of the Corporation, on the east by the alley east of Cadillac Street and production thereof northerly and southerly to the north and south limits of the Corporation, and on the south by the centre of the Tecumseh Road.

WARD NUMBER TWO

Comprising all that territory bounded on the west by the alley east of Cadillac Street produced northerly and southerly to the north and south limits of the Corporation, on the east by the alley east of Joseph Janisse Avenue and production northerly and southerly to the north and south limits of the Corporation, on the south by the centre of Tecumseh Road.

WARD NUMBER THREE

Comprising all that territory bounded on the west by the alley east of Joseph Janisse Avenue produced northerly and southerly to the north and south limits of the Corporation, on the north by the north limit of the Corporation, on the east by the easterly limits of the Corporation, on the south by the centre of Tecumseh Road.

3. The Council of the said City shall be composed of a Mayor, and Three Aldermen for each Ward.

4. This Order shall take effect on the first day of June, A.D. 1929, at the hour of twelve o'clock noon.

5. The first Nomination Meeting for the election of a Mayor and Alderman for the said City for all three wards shall take place on Saturday, the first day of June, A.D. 1929, at the hour of seven thirty in the afternoon in the City Hall in the said City; and Mr. John Francis Foster shall be the Returning officer, shall preside thereat, and shall give at least six days' notice of the said Meeting.

6. At the said Nomination Meeting, the provisions of "The Municipal Act" relating to elections, with the exception of the provisions regarding date of same, shall govern proceedings thereof.

7. If a Poll or Polls are necessary the same shall be held on Saturday the eighth day of June, A.D. 1929, and Mr. John Francis Foster shall be the Returning Officer for the holding of the Election for the whole Municipality, and a Poll shall be opened at every polling place at nine o'clock in the forenoon and shall be kept open until five o'clock in the afternoon on Election Day.

8. The polling subdivision of the City for said first election shall be as follows:—

Polling Subdivision No. One, Ward No. One

Comprising all that territory bounded on the West by the West limits of the Corporation, on the North by the North limits of the Corporation, on the East by the centre of the first alley East of Cadillac Street and its production thereof Northerly to the North limits of the Corporation, on the South by the Canadian National Railway.

Polling Subdivision No. Two, Ward No. One.

Comprising all that territory bounded on the West by the West limits of the Corporation, on the North by the Canadian National Railway, on the East by the alley East of Cadillac Street, on the south by the centre of Charles Street.

Polling Subdivision No. Three, Ward No. One.

Comprising all that territory bounded on the West by the West limits of the Corporation, on the North by the Centre of Charles Street, on the East by the Alley East of Cadillac Street, on the south by the centre of Huron Street.

Polling Subdivision No. Four, Ward No. One.

Comprising all that territory bounded on the West by the West limits of the Corporation, on the North by the centre of Huron Street, on the East by the centre of Hickory Road, on the South by the Essex Terminal Railway.

Polling Subdivision No. Five, Ward No. One.

Comprising all that territory bounded on the West by the centre of Hickory Road, on the North by the centre of Huron Street, on the East by the alley East of Cadillac Street, on the South by the Essex Terminal Railway.

Polling Subdivision No. Six, Ward No. One.

Comprising all that territory bounded on the West by the West limits of the Corporation, on the North by the Essex Terminal Railway, on the East by the alley East of Cadillac Street, on the South by the centre of Seminole Street.

Polling Subdivision No. Seven, Ward No. One.

Comprising all that territory bounded on the West by the West limits of the Corporation, on the North by the centre of Seminole Street, on the East by the alley between Albert Road and Hickory Road, on the South by the centre of Tecumseh Road.

Polling Subdivision No. Eight, Ward No. One.

Comprising all that territory bounded on the West by the alley between Albert Road and Hickory Road, on the North by the centre of Seminole Street, on the East by the Alley East of Cadillac Street, on the South by the centre of Tecumseh Road.

Polling Subdivision No. Nine, Ward No. Two.

Comprising all that territory bounded on the West by the alley East of Cadillac Street and its production thereof Northerly to the North limits of the Corporation, on the North by the North limits of the Corporation, on the East by the alley East of Strabene Avenue and its production thereof Northerly to the North limits of the Corporation, on the South by the Canadian National Railway.

Polling Subdivision No. Ten, Ward No. Two.

Comprising all that territory bounded on the West by the alley East of Strabene Avenue, on the North by the North limits of the Corporation, on the East by the alley East of Joseph Janisse Avenue, on the South by the Canadian National Railway.

Polling Subdivision No. Eleven, Ward No. Two.

Comprising all that territory bounded on the West by the alley East of Cadillac Street, on the North by the Canadian National Railway, on the East by the Alley between Park Street and Central Avenue and its production thereof Northerly to the Canadian National Railway, on the South by the centre of Reginald St.

Polling Subdivision No. Twelve, Ward No. Two.

Comprising all that territory bounded on the West by the alley East of Cadillac Street, on the North by the Centre of Reginald Street, on the East by the Alley between Central Avenue, and Malta Road, on the South by the centre of Tecumseh Road.

Polling Subdivision No. Thirteen, Ward No. Two

Comprising all that territory bounded on the West by the alley between Central Avenue and Park Street, on the North by the Canadian National Railway, on the East by the centre of Aubin Road, on the South by the centre of Franklin Street.

Polling Subdivision No. Fourteen, Ward No. Two.

Comprising all that territory bounded on the West by the alley West of Central Avenue, on the North by the centre of Franklin Street, on the East by the centre of Aubin Road, on the South by the centre of Seminole Street.

Polling Subdivision No. Fifteen, Ward No. Two.

Comprising all that territory bounded on the West by the alley West of Central Avenue, on the North by the centre of Seminole Street, on the East by the centre of Aubin Road, on the South by the Centre of Alice Street.

Polling Subdivision No. Sixteen, Ward No. Two.

Comprising all that territory bounded on the West by the alley West of Central Avenue, on the North by Alice Street, on the East by the centre of Aubin Road, on the South by the centre of Tecumseh Road.

Polling Subdivision No. Seventeen, Ward No. Two.

Comprising all that territory bounded on the West by the centre of Aubin Road, on the North by the Canadian National Railway, on the East by the Alley East of Bernard Road, on the South by the centre of Metcalf Street.

Polling Subdivision No. Eighteen, Ward No. Two.

Comprising all that territory bounded on the West by the centre of Aubin Road, on the North by the centre of Metcalf Street, on the East by the alley East of Bernard Road, on the South by the centre of Tecumseh Road.

Polling Subdivision No. Nineteen, Ward No. Three.

Comprising all that territory bounded on the West by the alley East of Joseph Janisse Avenue and its production thereof Northerly to the North limits of the Corporation, on the North by the North limits of the Corporation, on the East by the centre of Pillette Road, on the South by the C. N. Railway.

Polling Subdivision No. Twenty, Ward No. Three.

Comprising all that territory bounded on the West by the centre of Pillette Road, on the North by the North limits of the Corporation, on the East by the Easterly limits of the Corporation, on the South by the Canadian National Railway.

Polling Subdivision No. Twenty-one, Ward No. Three

Comprising all that territory bounded on the West by the alley between Francois and Bernard Road, on the North by the Canadian National Railway, on the East by the East Limits of the Corporation, on the South by the centre of Reginald Street.

Polling Subdivision No. Twenty-two, Ward No. Three.

Comprising all that territory bounded on the West by the alley between Francois and Bernard Road, on the North by the Centre of Reginald Street, on the East by the East Limits of the Corporation, on the South by the centre of Tecumseh Road.

8.—(a). The Polling places of the City for the said first election, and the Deputy returning officers and Poll Clerks for each Poll respectively shall be as

follows:—

Polling Place, Polling Subdivision Number One, Ward Number One.

Town Hall, Sandwich Street and Drouillard Road; Deputy Returning Officer, D. J. Adams; Poll Clerk, Mrs. S. Celina.

Polling Place, Polling Subdivision Number Two, Ward Number One.

F. D. Ribordy's Real Estate Office, 144 St. Luke Road; Deputy Returning Officer, William Drulard; Poll Clerk, Mrs. William Drulard.

Polling Place, Polling Subdivision Number Three, Ward Number One.

Lafortune's Store, 209½ Drouillard Road; Deputy Returning Officer, E. Norman; Poll Clerk, Miss A. May.

Polling Place, Polling Subdivision Number Four, Ward Number One.

Louis Denomy's Store, 260 Albert Road; Deputy Returning Officer, Wilfred Riberdy; Poll Clerk, C. Celina.

Polling Place, Polling Subdivision Number Five, Ward Number One.

R. C. Separate School, Drouillard Road; Deputy Returning Officer, Carl Lewis; Poll Clerk, Mrs. St. Louis.

Polling Place, Polling Subdivision Number Six, Ward Number One.

Ukranian Hall, 967 Drouillard Road; Deputy Returning Officer, W. Ozard; Poll Clerk, Marion Turchun.

Polling Place, Polling Subdivision Number Seven, Ward Number One.

A. Bradshaw's Residence, 1054 Albert Road; Deputy Returning Officer, Mr. Atherton; Poll Clerk, Dora Stott.

Polling Place, Polling Subdivision Number Eight, Ward Number One.

Mike Sherback's Store, 1162 Drouillard Road; Deputy Returning Officer, J. Ramsay; Poll Clerk, P. Reaume.

Polling Place, Polling Subdivision Number Nine, Ward Number Two.

Fred Vermette's Office, 57 Strabane Avenue; Deputy Returning Officer, Mrs. Hopkins; Poll Clerk, Mrs. Merlo.

Polling Place, Polling Subdivision Number Ten, Ward Number Two.

City Shoe Repair, Corner Ottawa and Janisse; Deputy Returning Officer, Mr. MacMillan; Poll Clerk, Mrs. Bennett.

Polling Place, Polling Subdivision Number Eleven, Ward Number Two.

Mike Koutsal's Residence, 743 Park Street; Deputy Returning Officer, Mike Koutzen; Poll Clerk, L. Janisse.

Polling Place, Polling Subdivision Number Twelve, Ward Number Two.

Gordon McGregor School, Alexis Road; Deputy Returning Officer, Mrs. T. Croher; Poll Clerk, Mrs. Crosley.

Polling Place, Polling Subdivision Number Thirteen, Ward Number Two.

William Bernyk's Residence, 701 Wescott Road; Deputy Returning Officer, C. Caple; Poll Clerk, Mrs. Downard.

Polling Place, Polling Subdivision Number Fourteen, Ward Number Two.

T. Patroni's Residence, 905 Aubin Road; Deputy Returning Officer, A. Parker; Poll Clerk, Mrs. Ramsey.

Polling Place, Polling Subdivision Number Fifteen, Ward Number Two.

Paul Kornacki's Store, 1003 Seminole Street; Deputy Returning Officer, Rose Reaume; Poll Clerk, Mr. Harty.

Polling Place, Polling Subdivision Number Sixteen, Ward Number Two.

Paul Kornacki's Store, 1003 Seminole Street; Deputy Returning Officer, Mr. Corski; Poll Clerk, Leo Girard.

Polling Place, Polling Subdivision Number Seventeen, Ward Number Two.

Paul Wounerski's Residence, 859 George Avenue; Deputy Returning Officer, George Dupuis; Poll Clerk, L. Stethem.

Polling Place, Polling Subdivision Number Eighteen, Ward Number Two.

Reaume Organization, Limited, Office, George and Tecumseh Roads; Deputy Returning Officer, N. D. Harper; Poll Clerk, Mrs. Potvin.

Polling Place, Polling Subdivision Number Nineteen, Ward Number Three.

Ontario Street School, Ontario Street; Deputy Returning Officer, A. L. Mitchell; Poll Clerk, F. Lougheed.

Polling Place, Polling Subdivision Number Twenty, Ward Number Three.

Hardy's Real Estate Office, 310 Ottawa Street; Deputy Returning Officer, Joseph L. Reaume; Poll Clerk, B. D'Aoust.

Polling Place, Polling Subdivision Number Twenty-one, Ward Number Three.

Store, Corner Seminole and Pillette Roads; Deputy Returning Officer, M. Duckworth; Poll Clerk, Mrs. Washbrook.

Polling Place, Polling Subdivision Number Twenty-two, Ward Number Three.

Taylor's Residence, 1487 Pillette Road; Deputy Returning Officer, A. T. Janisse; Poll Clerk, Miss Taylor.

9. The Voters' List to be used on said First Election shall be the last Revised Voters' List of the Town of Ford City.

10. After the Returning Officer has received the Ballot papers and the statement of the number of votes polled at each Polling place, he shall cast up from the statements the number of votes for each Candidate, and at the City Hall at noon on the tenth day of June A.D. 1929, publicly declare to be elected the Candidate or Candidates having the highest number of votes, and he shall also post up in some conspicuous place a statement, under his hand, showing the number of votes cast for each Candidate, and if upon the casting up of the Votes, or upon a recount two or more Candidates have an equal number of Votes, the said John Francis Foster shall at the time he declares the result of the polling, or after receiving the certificate of the result of the recount, as the case may be, give a Vote for one or more of such Candidates so as to decide the Election.

11. The said Election shall be conducted and carried out in all other respects in accordance with the provisions of the said "Municipal Act" so far as the same are applicable thereto.

12. That the said John Francis Foster, Clerk of the said City, be and he is hereby authorized as the Returning Officer for the holding of the said Election, to take all such steps as may be necessary for the proper holding of the Election.

13. The First meeting of the first Council of said City shall be held at the City Hall in the said City of East Windsor on the Twelfth day of June, A.D. 1929, at the hour of Eleven o'clock in the Forenoon, at which no business shall be proceeded with until after the declarations of office have been made by all the members-elect who present themselves for that purpose.

14. That the said City may use and adopt the Assessment made by the said Town of Ford City in the year 1928 as the Assessment on which the rate of taxation for the said City for the year 1929 shall be fixed and levied, and all by-laws, rules and regulations applicable to the Town of Ford City may be adopted by the said City so far as the same may be applicable or suitable thereto. And the said City by resolution or by-law may ratify and confirm the tax levy made by the Town of Ford City in 1929 as the tax levy of the said City for 1929 and the Collector's roll for 1929 whether completed or in process of completion by the Town of Ford City may similarly be ratified and confirmed as the collector's roll of the said City for 1929, and generally all acts and things done by the Municipal Council of the Town of Ford City in the year 1929 may by resolution or by-law be ratified, confirmed and adopted by the City of East Windsor as if the said City had been incorporated and erected into a City as of the first day of January, 1929.

15. The Board reserves the right to make and issue such further terms, orders, conditions and direction as it may deem necessary.

16. And the Board makes no Order as to costs except that the Applicants pay a fee of \$30.00 for Law Stamp herein.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2094

Application by the City of Ottawa, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law 6571—Carling Avenue, between Bank Street and Bronson Ave., to detached and semi-detached private dwellings.

Feb. 7th. Application and copy of By-law filed.

Mar. 8th. Hearing, pursuant to Appointment, 10 to 11 A.M., Council Chamber, City Hall, Ottawa. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.). Adjourned to Friday, 19th April, 1929, at 10 A.M.

Mar. 11th. Report of Mr. Commissioner Ellis filed.

Apr. 18th. Application herein abandoned. (See P.F. A—2215).

Apr. 20th. Copy of By-law No. 6616, repealing By-law 6571, filed.

REPORT OF MR. COMMISSIONER ELLIS

I heard this application at Ottawa on 8th March instant, as authorized under Section 8 Chapter 225, R.S.O.

There were a number of objections raised to the By-law.

The solicitors for D. Younghusband, owner of several lots in the area sought to be restricted, objected to the space between buildings as provided for in Section 5 of the By-law.

Two members of the City Council stated that in passing the By-law it had been overlooked that an Anglican church and a Union church had purchased land and proposed to erect churches in the area, and asked that a further opportunity should be given the Council to deal with the matter.

It was also stated that land might be required in the area for school extension purposes.

Outside these objections it appears to me that Section 4 of the proposed By-law, which deals with the line from the Street at which buildings can be erected, should not remain in this By-law, which was passed under the provisions of Section 398 of the Municipal Act. This matter can properly be dealt with under Sub-Section 8 of Section 406 of the Municipal Act.

Under all the circumstances I thought it advisable that the City Council should have a further opportunity to consider the By-law and accordingly adjourned the application until Friday, 19th April next, at 10 A.M., at the Council Chamber in the City of Ottawa.

(Sgd.) J. A. ELLIS,
Commissioner.

Toronto, Mar. 11th, 1929.

PROCEDURE FILE A-2096

Application by the City of Hamilton, under section 120 of "The Railway Act", for approval of plan (dated 24th Feb., 1922) for construction of "Mountain Highway", in the City of Hamilton, under and across the Incline Railway of The Hamilton Mountain Park Co. Ltd.

Feb. 2nd. Application filed.

Apr. 10th. Revised plans—blue print drawings "Plan No. I-16 B of W" filed.

Apr. 10th. Engineer's Report filed.

Apr. 15th. Hearing, pursuant to Appointment, 10.30 to 11.15 A.M. and 2 to 3 P.M., Council Chamber, Hamilton. Application granted. Order to be drafted and approved by Parties and submitted to the Board.

May 6th. Session of Board: Vice-Chairman and Secretary, 11.30 A.M. to 12.30 P.M. Order settled in presence of Counsel for City and Incline Railway Co.

May 6th. Order issued.

April 15th, 1929.

ORDER

Upon the application of the Corporation of the City of Hamilton, in the presence of Counsel for the Corporation of the City of Hamilton and the Wentworth Incline Railway Limited, and upon reading the said application, the report and recommendation of H. W. Middlemist, Chief Engineer of this Board, respecting the plans and properties, and upon hearing what was alleged by Counsel aforesaid, the Board orders that the Corporation of the City of Hamilton be and it is hereby authorized to construct the Mountain Highway or Boulevard under the Incline Railway of the Wentworth Incline Railway, Limited, now in the City of Hamilton, as shown on the plans and profiles prepared by W. L. McFaul, Engineer of the said City Corporation, known as I 16 B of W. on file with the Board under file Number P. 361, and further in accordance with the letter dated 15th day of April, A.D., 1929, addressed to F. R. Waddell and signed by W. L. McFaul, Engineer for the City Corporation aforesaid, and J. W. Tyrrell, Engineer for the Wentworth Incline Railway Limited.

The Board further orders as follows:—

(a) The said work of construction shall be carried on in accordance with directions that may from time to time be given by the Engineer of the Board and the Board shall exercise supervision in the construction of the said Highway or Boulevard under the said Incline Railway and the work to be performed as shown by the said plans and profiles.

(b). The costs of said work shall be borne by the Corporation of the City of Hamilton.

(c). The structures and works constructed by the Corporation of the City of Hamilton, except stringers, ties and rails, shall be at all times maintained in perpetuity and repaired by the said Corporation of the City of Hamilton.

(d). The Corporation of the City of Hamilton shall compensate said Wentworth Incline Railway Limited for any interference with or stoppage of traffic during such construction.

(e). The Board may make such further orders or directions in the premises upon the application of either party as it deems advisable.

(Seal)

(Sgd.) A. B. INGRAM.
Vice-Chairman.

PROCEDURE FILE A-2097

In the matter of the Application of The Oakwood Telephone Company, Limited, for authority to increase the charges to shareholders for telephone service from \$8.00 to \$11.00 per annum; also, for the approval of an annual charge of \$15.00 to non-shareholders, subscribers to pay the cost of battery renewals in addition to the foregoing charges.

Feb. 7th. Application filed.

Feb. 27th. Hearing, pursuant to appointment, 1.15 to 2.30 P.M., Court House, Lindsay. (Chairman authorized under section 8, Chapter 225, R.S.O.).
 Feb. 28th. Report of Chairman filed and adopted.
 Mar. 1st. Order.

REPORT

The undersigned, having heard the evidence of all parties relative to this application, recommends that the annexed Order be adopted as the Order of the Board.

(Sgd.) C. R. McKEOWN,
Chairman,
 March 1st, 1929.

ORDER

Upon the application of the above named Applicant, upon reading the Report of C. R. McKeown, Esquire, K.C., Chairman, who pursuant to appointment heard the evidence adduced on behalf of all parties, which Report has been adopted as the basis of this Order, Statements of Assets and Liabilities, Receipts and Disbursements and other material filed.

The Board orders that the Applicant, The Oakwood Telephone Company, Limited, be authorized to charge the following rates for telephone service;

To Shareholders\$11.00 per annum.

To Non-shareholders\$15.00 per annum.

For an Extension Wall Telephone

on the same premises\$4.00 per annum.

The Board further orders that the charges herein approved shall not include the cost of the renewal of batteries, which must be paid for by the subscriber, who shall make such renewal whenever required so to do by the Applicant.

And the Board makes no order for costs, save and except that the Applicant shall pay \$10.00 for the law stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2098

In the matter of sections 56 and 59 of "The Highway Improvement Act" (R.S.O., 1927, Chapter 54), and,

In the matter of section 28 of "The Public Works Act" (R.S.O., 1927, Chapter 52), and

In the matter of compensation to be paid to the owner, James McNeice, in respect of the southerly 37 feet of the easterly 50 feet of Block "Y", Registered plan 2130, York, Township of Etobicoke. (Drawing P. 1625)

Feb. 8th. Reference filed by the Honourable the Minister of Public Highways.

May 13th. Hearing, 10.30 A.M. to 4 P.M., pursuant to appointment. Adjourned to 17th inst., at 10 A.M.

May 17th. Hearing continued, 10 A.M. to 12.55 P.M. Hearing concluded. Board will view "locus" before making Award.

June 26th. Award issued.

AWARD

To all to whom these presents shall come :

The Ontario Railway and Municipal Board sends Greeting.

Whereas the Honourable the Minister of Public Works and Highways did for and in the name of His Majesty the King, enter upon, take and expropriate certain lands, the property of James McNiece, which he the said Minister did deem necessary for the use of the Department of Public Highways under The Provincial Highway Act, which lands are said to be and described as a part of Block "Y", Plan 2130 in the Township of Etobicoke, in the County of York.

And whereas the land taken and expropriated as above set out comprises 1350 square feet,

And whereas there is now located upon the said land two gasoline pumps owned and operated by the said James McNiece, which said pumps will require to be removed by the said James McNiece,

And whereas to make room for the said gasoline pump in front of the store now occupied by the said James McNiece on said Block "Y" Plan 2130, it will be necessary for the said James McNiece to change the front of his said building by removing the said front some short distance further from the highway,

And whereas pursuant to the provisions of Section 29 of The Ontario Public Works Act the Honourable, the Minister of Public Works and Highways, gave notice that he desired that the compensation to be made to the owner of the said lands should be determined by The Ontario Railway and Municipal Board.

Now, the said The Ontario Railway and Municipal Board having taken upon itself the burden of the arbitration to fix such compensation as aforesaid, and having heard and duly considered all the allegations and evidence of the said respective parties of and concerning the said matters in difference, and so referred as aforesaid, doth make and publish this its Award in writing of and concerning the said matters in dispute so referred to it, and doth hereby Award and Direct :

1. That the Province of Ontario do pay to the said James McNiece for the lands taken, namely, 1350 square feet, the sum of \$540.00.

2. That the said Province of Ontario shall pay to the said James McNiece for the removal of the gasoline pumps above referred to the sum of \$75.00.

3. That the Province of Ontario shall pay to the said James McNiece the sum of \$400 by way of damages accruing to the said James McNiece by reason of the said expropriation.

4. That in addition thereto the Province of Ontario shall pay to the said James McNiece the sum of \$54.00 being 10% of the amount payable for the lands forcibly taken, making a total sum payable by the said Province of Ontario to the said James McNiece of \$1,069.00, and 5% interest thereon from the date of expropriation of the said land to the date of payment thereof :

5. And this Board is pleased to order that the said Province of Ontario shall pay to the said James McNiece his costs of this arbitration fixed at \$100, and shall pay the sum of \$25.00 for Law Stamp, the Board's tariff fee herein.

In witness whereof the Members of the Ontario Railway and Municipal Board have hereto set their hands and have caused to be affixed the Seal of the

Board this 26th day of June, A.D. 1929, at the City of Toronto, in the Province of Ontario.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman,

(Sgd.) A. B. INGRAM,

Vice-Chairman.

(Sgd.) J. A. ELLIS,

Commissioner.

PROCEDURE FILE A-2100

In the matter of sections 56 and 59 of "The Highway Improvement Act" (R.S.O., 1927, Chapter 54), and

In the matter of section 28 of "The Public Works Act", (R.S.O., 1927, Chapter 52) and

In the matter of compensation to be paid to Owner, Edward Stanners, in respect of the southerly 37 feet of the easterly 50 feet of Block "Z", Registered Plan 2130, York, (Drawing No. P. 1614).

Feb. 8th. Reference filed by the Honourable the Minister of Public Highways.

May 13th. Hearing adjourned to 17th inst., at 10.30 A.M.

May 17th. Hearing adjourned 'sine die' at request of Counsel.

PROCEDURE FILE A-2118

Between :

The Hamilton Street Railway Co.,

Applicant,

—and—

The Corporation of the City of Hamilton.

Respondent.

Application for approval of operation of One-Man car on any and all routes of applicant's system.

Feb. 26th. Application filed.

Mar 8th. Copy of plans and specifications of type of One-Man-Two-Man car now in use by Applicant (not to be operated by One-Man. See P.F. A—1009) filed.

Mar. 12th. Hearing, pursuant to appointment, 10.30 to 11.30 A.M., Council Chamber, Hamilton. Adjourned to 27th March, 1929, at 10.30 A.M.—or 7th May, 1929, at 10.30 A.M.—at Hamilton. (Mr. Osler to advise which date will be convenient).

Mar. 15th. At request of Counsel Hearing fixed for 27th inst.

Mar. 27th. Hearing continued, 10.30 to 11.45 A.M., Council Chamber, Hamilton. Board permits cars to be operated on Westdale and York; Wentworth and C.N.R.; York and King West; and Incline routes—also on all routes on Sundays, and week days and Sundays on all routes between 11 P.M. and 6 A.M., each party to be at liberty to make further application at any time to restrict or extend limits of Order. Order to be drafted by City Solicitor and submitted to Mr. Coyne for approval.

Apr. 10th. Approved Draft Order filed.

Apr. 11th. Order issued.

PROCEDURE FILE A-2118a

Apr. 5th. Plan (E1653) showing reconstruction of cars for operation as One-Man two-Man cars, filed.

Apr. 6th. Plan (E1653) approved and certified.

March 27th, 1929.

ORDER

Upon the application of the above named Applicant, at the Sittings of the Board held this day at Hamilton, in the presence of Counsel for the Applicant and Counsel for the Respondent, and upon hearing the evidence adduced on behalf of the Applicant, and upon hearing Counsel for the Applicant and for the Respondent:

1. The Board doth hereby approve of and permit the operation by the Applicant of cars operated by one employee on the following routes of its system, namely:—

Westdale and York Street route,
Wentworth Street and C.N.R. route,
York Street and King Street West route,
Incline Railway route.

2. And the Board doth further approve of and permit the operation by the Applicant of cars operated by one employee on any and all routes of its system between the hours of 11 P.M. and 6 A.M. and on Sundays.

3. And the Board doth hereby declare that either the Applicant or the Respondent shall have the right to apply to the Board from time to time for an Order or Orders increasing or decreasing the number of routes upon which the Applicant may operate cars operated by one employee or amending, changing or varying this Order in any other way.

4. And the Board doth further order that the Applicant shall pay all fees payable in respect of this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2140

Application by R. H. Green, under section 102 of "The Telephone Act", for approval of the sale to The Bell Telephone Co. of Canada, Ltd., of telephone system formerly owned and operated by The Zorra Telephone Co. Ltd.

Mar. 11th. Application and material filed.

Apr. 16th. Hearing, pursuant to appointment, 11 A.M. to 12.30 P.M., Court House, Woodstock. Approval withheld.

June 4th. Hearing pursuant to appointment, 2 to 2.30 P.M., at Board's Chambers. Application granted.

June 5th. Order. (See P.F. A—2265)

PROCEDURE FILE A-2142

Application by the Village of Forest Hill, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 337—Lands fronting on Suprir Avenue, Riddell Avenue and part of Briar Hill Avenue.

Mar. 13th. Application and material filed.

Apr. 9th. Hearing, 11 to 11.20 A.M., at Board's Chambers. Application granted. Applicant's Solicitor to draft Order.

Apr. 18th. Draft Order filed.

Apr. 20th. Order issued.

April 9th, 1929.

ORDER

Upon the application of the said Corporation; upon reading the material filed by Melville Grant, Esquire, Solicitor for the Applicant, and upon hearing what was alleged by Counsel for the Applicant, and no one appearing to oppose the said application, although public notice of the Hearing of the same was duly given as provided by Statute and directed by the Board.

The Board Orders, under and in pursuance of section 398 of "The Municipal Act", being Chapter 233, Revised Statutes of Ontario, 1927, that the said By-law NO. 337, intituled "A By-law to place building restrictions upon the lands fronting on Superior Avenue, Riddell Avenue and part of Briar Hill Avenue" be and the same is hereby approved.

And the Board doth make no order as to costs except for the payment by the Applicant Corporation of the fee of Ten Dollars for Law Stamps payable on the Order herein.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2144

Between:

Eslie Terrill & Son, et al,

Applicants,

—and—

D. S. and A. G. Austin, (trading as The Murray-Brighton Telephone Co.) and the Commissioners for the telephone system of the Municipality of Brighton,

Respondents.

Application for an Order requiring the respondents (D. S. & A. G. Austin) to furnish the Applicants with telephone service and prescribing terms and conditions therefor under section 95 of "The Telephone Act".

Mar. 14th. Application filed.

Mar. 26th. Hearing, pursuant to Appointment, 1.15 to 2.15 P.M., Council Chamber, Trenton. Judgment reserved.

May 11th. Application dismissed (See letter of even date).

PROCEDURE FILE A-2153

Between:

Samuel Palmer, et al,

Applicants,

—and—

Commissioners for Telephone System of the Municipality of the Township of Brighton, and D. S. Austin and A. G. Austin, trading as The Murray Brighton Telephone Co.,

Respondents.

Application for service under section 95 of "The Telephone Act".

Mar. 20th. Application filed.

Mar. 26th. Hearing, pursuant to Appointment, 1.15 to 2.15 P.M., Council Chamber, Trenton. Application dismissed (See letter, May 11th, 1929, on P.F. A—2153; also letter May 9th, 1929, on P.F. A—2144).

PROCEDURE FILE A-2158

In the matter of the Petition of Mary E. Wickett, and others, under section 8 of "The Local Improvement Act", against the construction of a five foot concrete sidewalk on Pine Avenue (South side) between Balsam Avenue and Beech Avenue, in the City of Toronto.

Mar. 21st. Petition filed.

Apr. 17th. Hearing, pursuant to Appointment, 11 to 11.50 A.M., at Board's Chambers (See City By-law 11269, May 30th, 1927, re Flankage allowances) (Section 27 of "The Local Improvement Act") Petition dismissed. City Solicitor to draft Order.

Apr. 23rd. Draft Order filed.

Apr. 23rd. Order issued.

April 17th, 1929.

ORDER

Upon the Petition of Mary E. Wickett and others, pursuant to Section 8 of "The Local Improvement Act", Revised Statutes of Ontario, Chapter 235, for relief against the construction of a five foot concrete sidewalk on Pine Avenue (south side) between Balsam Avenue and Beech Avenue, upon reading the affidavit of Frederick Ernest Claxton filed proving service of the Appointment for Hearing, and upon hearing the Petitioners and Counsel and others on behalf of the Corporation of the City of Toronto,

(1). This Board doth order that the Application of the Petitioners for relief against the construction of a five foot concrete sidewalk on Pine Avenue (south side) between Balsam Avenue and Beech Avenue, be and the same is hereby dismissed.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2160

Application under section 105 of "The Telephone Act", by Dr. W. H. Woods, complaining that The Caradoc-Ekfrid Telephone Co. Ltd. is discriminating in favour of those of its subscribers connected upon lines terminating at Strathroy and Glencoe in the matter of charges for service at the said points.

Mar. 22nd. Application and material filed.

May 15th. Hearing, pursuant to Appointment, 9.30 to 10.30 A.M., Town Hall, Mount Brydges. (Vice-Chairman authorized under section 8, Chapter 225, R.S.O.) Matter to be referred to full Board which decided there was no discrimination as alleged. (See letters of May 31st and June 6th, 1929).

PROCEDURE FILE A-2165

Application by the City of Toronto, under section 398, subsection (2b) of "The Municipal Act", for approval of its By-law No. 12042, repealing its Restricted Area By-law No. 9651 in so far as it prevents the conversion of No. 216 Cottingham Street into a duplex dwelling house.

Mar. 26th. Application and material filed.

Apr. 22nd. Hearing, pursuant to Appointment, 1 A.M.: 12.05 P.M. to 12.15 P.M., at Board's Chambers. Hearing concluded. Application granted.

Apr. 26th. Draft Order filed.

Apr. 26th. Order issued.

April 22nd, 1929.

ORDER

Upon the application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its By-law Number 12042; upon hearing what was alleged this day by Counsel for the Applicant and certain property owners affected; upon considering the said By-law and upon hearing what was alleged by and on behalf of all Parties affected, and it appearing that there was little, if any, opposition to the approval of the said By-law, and proof having been filed of Notice of the Application as directed by the Board.

The Board orders, under and in pursuance of the provisions of section 398 of "The Municipal Act", that the said By-law, being intituled "No. 12042. A By-law "to repeal By-law No. 9651 in so far as it prevents the conversion of "No. 216 Cottingham Street into a duplex dwelling house", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2166

In the matter of the Petition of The Toronto Savings & Loan Co., and others, under section 20 of "The Municipal Act", for annexation to the City of Peterborough of part of the Township of Monaghan (North).

Mar. 23rd. Petition etc. filed.

Apr. 23rd. Hearing, pursuant to Appointment 12 M. to 1 P.M., Council Chamber, Peterborough. Application granted. Annexation to take effect 1st July, 1929. Order to be drafted by Applicant's Solicitor and approved by the Township.

June 10th. Approved draft Order filed.

June 14th. Order issued.

April 23rd, 1929.

ORDER

Upon the application of the above named applicants and upon reading the Petition of said Applicants, the Resolution of the Council of the Corporation of the City of Peterborough passed on the fourth day of March 1929 declaring the expediency of such annexation and Notice of the said Resolution and Petition having been duly given by the said Council to the Council of the Township of Monaghan (North) and to the Council of the County of Peterborough respectively and Notice of the hearing of this Application having been duly served, advertised and posted, and in the presence of the Solicitors for the said Township of Monaghan (North) and upon hearing what was alleged by Counsel on behalf of the Corporation of the City of Peterborough.

1. The Board orders and declares that the lands and premises in the Township of Monaghan (North) and County of Peterborough included in said Petition and being described as follows:

All and singular that certain parcel or tract of land situate lying and being in the Township of Monaghan in the County of Peterborough and being composed of part of Lot Number Twelve in the thirteenth concession of the said Township of Monaghan containing thirteen acres more or less which said land may be more particularly described as follows: Commencing on the northern limit of Hopkins Avenue as shown on registered plan number Twenty Nine for the said Township of Monaghan at a point distant westerly four hundred feet from the western limit of Monaghan Road; thence northerly and parallel to the said Monaghan Road and along the western limit of the Queen Mary School property as described in registered instrument number 7815 for the City of Peterborough four hundred and twenty-six feet eight inches more or less to the north west angle of the said Queen Mary School property; thence easterly and parallel to said Hopkins Avenue and along the northerly limit of said Queen Mary School property four hundred feet more or less to the western limit of the said Monaghan Road; thence northerly along the said western limit of said Monaghan Road three hundred and fifty three feet nine inches more or less to the southern limit of Woodland Street as shown upon said plan number Twenty Nine; thence westerly and along the southern limit of said Woodland Street nine hundred and sixty one feet more or less to the north west angle of lot number Forty Seven as shown upon said plan number Twenty Nine; thence southerly along the western limits of lots numbers Forty Seven, Forty Eight, Forty Nine and Fifty as shown on said plan number Twenty Nine to the south west angle of said lot number Fifty; thence easterly along the southern limit of said lot number Fifty forty seven feet eight inches; thence southerly and parallel to the said Monaghan Road five hundred and ninety two feet eight inches more or less to the northern limit of said Hopkins Avenue; thence easterly along the northern limit of said Hopkins Avenue five

hundred and ten feet more or less to the place of beginning. Which said land comprises lots Numbers Five, Six, Seven, Eight, Nine, Twenty Three, Twenty Four, Twenty Five, Twenty Six, Twenty Seven and Twenty Eight south of Wallis Avenue according to said plan number Twenty Nine for the Township of Monaghan and parts of lots numbers Two, Three, Four, Five, Six and all of lots numbers One, Seven, Eight, Nine, Ten, Eleven, Twelve, Thirteen, Thirty One, Thirty Two, Thirty Three, Thirty Four, Thirty Five, Thirty Six, Thirty Seven, Thirty Eight, Thirty Nine, Forty, Forty One, Forty Two, Forty Three, Forty Four, Forty Five, Forty Six, Forty Seven, Forty Eight, Forty Nine and Fifty and parts of lots Numbers Fourteen, Fifteen and Sixteen all north of Wallis Avenue as shown upon said plan number Twenty Nine and also two lanes as shown upon the said plan, and also all of Ivanhoe and Albertus Avenues as shown upon said plan and all that part of Wallis Avenue included in the above particular description be and the same are hereby annexed to the Corporation of the City of Peterborough SUBJECT to the following terms and conditions namely:

1. That the annexation shall come into force on the first day of July 1929

2. That the said lands shall be added to and form part of Ward Number Three

3. That the Corporation of the City of Peterborough do pay to the Corporation of the Township of Monaghan (North) the sum of Two Hundred and Fifty Dollars in full of the share of the debenture debt of the said Township for the payment of which the said lands above described are liable and that upon payment of the said sum of Two Hundred and Fifty Dollars the said lands shall be free from all liability in respect of any debt, charge, or right of the said Corporation of the Township of Monaghan (North) save and except the right of the said Corporation of the Township of Monaghan (North) to levy and collect one half the taxes for the current year nineteen hundred and twenty nine charged against the said lands above described.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2172

Application by the City of Toronto, under section 398, (2b) of "The Municipal Act", for approval of its By-law No. 12048, amending its By-law No. 11688 (being a By-law to repeal its Restricted Area By-law Nos. 9285 and 9411 in so far as they prevent the erection of duplex houses on land north of Austin Terrace and between Walmer and Spadina Roads.

Mar. 28th. Application and material filed.

May 7th. Hearing, pursuant to Appointment, 11 A.M.: 11.30 to 11.40 A.M., at the Board's Chambers. Application granted. City Solicitor to draft Order.

May 9th. Draft Order filed.

May 13th. Order issued.

May 7th, 1929.

ORDER

The Application of the Corporation of the City of Toronto for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its above mentioned By-laws having come before this Board by appoint-

ment this day, no property owners appearing in opposition thereto although duly notified as by affidavits filed appears, upon considering the said By-law and upon hearing what was alleged by Counsel for the said Corporation and it appearing that there was no opposition to this application.

The Board orders that the said By-law, being intituled "No. 12048. A By-law to amend By-law No. 11668 being "A By-Law to repeal By-laws Numbers 9285 and 9411 in so far as they prevent the erection of duplex houses on land north of Austin Terrace and between Walmer and Spadina Roads", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2173

Application by Home Smith & Co., Owners, under "The Planning and Development Act", for approval of plan of parts Registered Plans M-471, M-473, M-356 and 2445, east and west of the Kingsway, between Bloor and Queen Streets, in the Village of Swansea (Township and County of York).

Mar. 28th. Application and material filed.

Apr. 18th. Hearing, pursuant to Appointment, 11 to 11.30 A.M. at Board's Chambers. Mayfield Ave. to be made 66 feet instead of 50 feet wide and rad-iused. York Ave. to be 50 feet instead of 30 feet. Plan so amended will be approved. (See Reporter's Notes).

PROCEDURE FILE A-2182

Application by The Caradoc-Ekfrid Telephone Co. Ltd., under section 103 of "The Telephone Act", for authority to increase charges for service.

Apr. 3rd. Application filed.

May 16th. Hearing, pursuant to Appointment, 9.30 to 11 A.M., Town Hall, Mount Brydges. (Vice-Chairman authorized under section 8, Chapter 225, R.S.O.).

May 31st. Report of Vice-Chairman filed and adopted.

May 31st. Order.

REPORT

In the matter of the Application of the Caradoc-Ekfrid Telephone Company, Limited, for authority to increase the charges for telephone service, as follows:
For Rural Party Line Service:

To Subscribers purchasing their own telephones:

On Lines terminating at Melbourne or Mount Brydges: from \$15.00 to \$17.50 per annum.

On Lines terminating at Strathroy or Glenco: from \$16.25 to \$20.00 per annum.

To Subscribers for whom the Company purchases all equipment:

On Lines terminating at Melbourne or Mount Brydges: from \$17.50 to \$20.00 per annum.

On Lines terminating at Strathroy or Glencoe: from \$18.75 to \$22.50 per annum.

For Local Service at Melbourne and Mount Brydges: from \$21.25 to \$25.00 per annum.

The foregoing charges are subject to a discount of 20% on all amounts paid within thirty days from the date upon which any such amount falls due.

The undersigned, having heard the evidence of all parties relative to this application, recommends that the annexed Order be adopted as the Order of the Board.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

Toronto, May 31st, 1929.

May 31st., 1929.

ORDER

Upon the application of the above said Applicant, upon reading the Report of A. B. Ingram, Esquire, Vice-Chairman, who pursuant to appointment heard the evidence adduced on behalf of all parties, which Report has been adopted as the basis of this Order, Statements of Assets and Liabilities, Receipts and Disbursements and other material filed.

The Board orders, subject to the several conditions prescribed in this Order, that the Applicant, The Caradoc-Ekfrid Telephone Company, Limited, be authorized to charge the following rates for telephone service, to take effect as from July 1st, 1929:

To Subscribers purchasing their own telephones:

For Rural Party Line Service:

On Lines terminating at Melbourne
or Mount Brydges\$17.50 per annum.
On Lines terminating at Strathroy
or Glencoe\$20.00 per annum.

To Subscribers for whom the Company purchases all equipment:

For Local Service at Melbourne or
Mount Brydges\$25.00 per annum.

For Rural Party Line Service:

On Lines terminating at Melbourne
or Mount Brydges\$20.00 per annum.
On Lines terminating at Strathroy
or Glencoe\$22.50 per annum.

The foregoing charges are subject to a discount of 20% on all amounts paid within thirty days from the date upon which any such amount falls due.

The Board further orders

1. That the charges herein authorized shall include the costs of such battery renewals as may be necessary to maintain the provision of an efficient service by the Applicant at all times.

2. That for the purpose of providing a fund to meet the cost of the renewal of its plant and equipment, the Applicant shall on December 31st, 1930, and each year thereafter, set aside out of its earnings a sum equal to not less than five per cent. of the total value of the plant and equipment used in the Applicant's

business on December 31st in each year. The fund so provided shall, unless otherwise authorized by the Board, be applied exclusively to the cost of renewing such portion of the said plant and equipment as may from time to time be rendered necessary by depreciation or obsolescence, and after deducting therefrom such amounts as may have been so expended in any one year the balance remaining shall be deposited in a chartered bank at interest, and the money so deposited may, with the approval of the Board, be invested in interest-bearing securities, and all interest accruing from any portion of the depreciation fund so deposited or invested shall from time to time be carried to the credit of the said fund.

3. That the Applicant shall on or before the Fifteenth Day of January in each year furnish the Board with a Report setting forth:

(a) The total amount standing at the credit of the depreciation fund on the First day of January in the preceding year.

(b) The amount transferred from revenue to such fund in the year ending December 31st last.

(c) The amount expended upon reconstruction and replacements in the year ending December 31st last.

(d) The total amount standing at the credit of such fund on December 31st last.

(e) The amount of such fund which has been used in the purchase of securities.

(f) The names and values of the securities so purchased.

(g) A certified statement from the Bank showing the balance standing at the credit of the depreciation reserve on the 31st day of December last.

4. That the Applicant shall keep separate records of all expenditure upon the construction, operation, maintenance and renewal of its plant and equipment, and shall each year furnish its shareholders with an Annual Report and Balance Sheet in the form approved of by this Board, as set forth on pages 123 to 126 of "Telephone Systems, 1920", or in such form as may be hereafter prescribed by the Board.

And the Board makes no order for costs, save and except that the Applicant shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2190

Application by the Township of East York, under section 398 of "The Municipal Act", for approval of its By-law No. 1518, amending its Restricted Area By-law No. 1243 (as amended by By-law 1347) by adding certain districts thereto—(Clause 1(B)).

Apr. 8th. Application and material filed.

May 14th. Hearing, pursuant to Appointment, 10.30 to 11 A.M., at the Board's Chambers. Application granted. Applicant's Solicitor to draft Order.

May 15th. Draft Order filed.

May 18th. Order.

May 14th, 1929.

ORDER

Upon the Application of the said Corporation, and the Board having, pursuant to Appointment on the 14th day of May, 1929, heard Counsel for the Applicant and no one appearing in opposition to the said By-law. Notice of such Appointment having been duly given as directed by the Board, and the Board having granted the Application of the said Township.

The Board orders, under and in pursuance of the provisions of Section 398 of "The Municipal Act", that the said By-law No. 1518, entitled 'By-law No. 1518, of the Township of East York, being a By-law to amend By-law No. 1243, as amended by By-law 1347,' being a By-law for the purpose of dividing the Township into Industrial, Business and Residential Areas and restricting the user of land and buildings within the defined areas"; be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2205

Application by the Town of Sudbury, under section 398 of "The Municipal Act", for approval of its restricted Area By-law No. 1124—restricting to private residences only, the area set forth in Schedule "A" to the By-law.

Apr. 16th. Application and material filed.

May 30th. Hearing, pursuant to Appointment, 10 A.M. to 12 M., Council Chamber, Sudbury. Mr. Commr. Ellis authorized under section 8, Chapter 225 R.S.O.) By-law to be amended (See Reporter's Notes). Amending By-law to be drawn by Mr. Buchanan and approved by various parties. By-law will then be approved as amended.

June 5th. Report of Mr. Commr. Ellis filed, and adopted.

June 15th. Amending By-law No. 1132 filed.

June 20th. Order issued.

REPORT OF MR. COMMISSIONER ELLIS

Pursuant to Appointment on Thursday, the 30th day of May, 1929, I heard this application at the Council Chamber, in the Town of Sudbury, being duly authorized under section 8, Chapter 225, R.S.O., 1927.

The By-law includes 33 streets or portions of Streets, and restricts the buildings erected or to be erected on the land abutting thereon to private residences.

A number of objections were heard to the By-law. One by Mrs. John Boyzkowney was not considered because it appeared that she had secured a building permit before the By-law was passed. The Solicitor for the owner of Lots 140 and 141 Bloor Street on the corner of Bloor and College Streets asked that these lots be left unrestricted. I recommend that this request be not granted.

With regard to the other objections the representatives of the Town thought that they might be favourably considered, and I therefore recommend that upon a By-law being passed amending By-law 1124, the latter By-law as so amended be approved.

These proposed amendments are as follows:—

1. Schools, churches, buildings for charitable and benevolent institutions and fraternal societies, may be erected in any of the areas and used for these purposes.

2. On Larch Street there are now two buildings erected, and used for business purposes on Lots 4, 5, 6 and 7 on the South side. Extensions of these buildings can be made for the purposes of the businesses now carried on, but not for any other purpose.

3. The south side of Kathleen Street, from Mackenzie to C.N.R. tracks to be struck out of the By-law.

4. That part of Patterson Street, from Mackenzie to College, to be withdrawn from the By-law.

5. Adie Street—Both sides of Adie Street to be struck out of the By-law if the Town Council so desires, but in any event the south side of the street to be omitted.

6. Lots 118 and 119 Cedar Street to be omitted from the By-law.

7. One side of Station Street from Drinkwater to Nelson to be omitted from the By-law.

8. From Lot 264 on the west side, and Lot 74 on the east side of Drinkwater Street, to Station Street, to be omitted from the By-law.

9. On Elm Street the residential area to extend only to Regent Street.

10. Semi-detached and duplex houses may be erected and used in any of the residential areas, and if the Town Council so desires apartments may also be erected and used in such areas.

Respectfully submitted,
(Sgd.) J. A. ELLIS,
Commissioner.

Toronto, June 5th, 1929.

Adopted:

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

June 20th, 1929

ORDER

Upon the application of the said Corporation, and upon reading the copy of the said By-law No. 1124 and the other material filed, and Mr. Commr. Ellis, duly authorized under section 8, Chapter 225, R.S.O., having, pursuant to Appointment, at the Council Chamber, in the Town of Sudbury, on the 30th day of May, 1929, heard all parties interested, and upon consideration of the Report of Mr. Commissioner Ellis, dated the 5th day of June, 1929, on such Hearing, which Report has been adopted by the Board, and upon consideration of the said amending By-law Number 1132, passed by the Council of the said Corporation in accordance with the direction of the Board,

The Board orders, under and in pursuance of the provisions of section 398 of "The Municipal Act", that the said By-law Number 1124, intituled "By-law No. 1124 to restrict to use for private residences only the land and buildings as here-

"inafter set forth", as amended by the said By-law Number 1132, be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2209

In the matter of sections 56 and 59 of "The Highway Improvement Act" (R.S.O., 1927, Chapter 54) and

In the matter of section 28 of "The Public Works Act", (R.S.O., 1927, Chapter 52), and

In the matter of compensation to be paid to the Owner, F. W. Sutherland, in respect of part of Lot 19, Reg. plan No. 1176, Township of Etobicoke, (Drawing P.1611).

Apr. 17th. Reference filed by the Honourable the Minister of Public Highways.

Apr. 30th. Particulars of Claim filed.

May 13th. Hearing, pursuant to Appointment, 10.30 to 10.45 A.M., at Board's Chambers. Hearing adjourned to Monday, the 20th May, 1929, at 10.30 A.M.

May 20th. Hearing continued and concluded—10.30 A.M. to 12.15 P.M. and 2.15 to 3.45 P.M. Board reserves Award.

June 26th. Award issued.

AWARD

To all to whom these presents shall come:

The Ontario Railway and Municipal Board sends Greeting:

Whereas the Honourable the Minister of Public Works and Highways did, for and in the name of His Majesty the King, enter upon, take and expropriate certain lands, the property of F. W. Sutherland, which he the said Minister did deem necessary for the use of the Department of Public Highways under The Provincial Highway Act, which lands are said to be and described as part of Lot No. 19, Plan 1176 in the Township of Etobicoke, in the County of York, and whereas the land taken as above set out comprises 1500 square feet,

And whereas there is now located upon the said lands so expropriated a small building for which the said F. W. Sutherland according to the evidence is in receipt, and has for some time been in receipt, of a monthly rental of \$20.00.

And whereas in taking this land, and in levelling it to correspond with the rest of the highway, it will be necessary to cut down some distance below the level of the lot in question some fourteen feet at one end of the said lot and some six feet at the other end thereof, so that for the proper protection of the balance of the said lot a retaining wall must and should be constructed by the Highways Department.

Now the said The Ontario Railway and Municipal Board having taken upon itself the burden of the arbitration to fix such compensation as aforesaid, and having heard and duly considered all the allegations and evidence of the said respective parties of and concerning the said matters in difference, and so referred as aforesaid, doth make and publish this its Award in writing of and concerning the said matters in dispute so referred to it, and doth hereby Award and Direct:

1. That the Province of Ontario do pay to the said F. W. Sutherland for the land taken as above set out the sum of \$600.00.

2. That the said Province of Ontario do pay to the said F. W. Sutherland the sum of \$800.00 by way of compensation for the building now situated upon the land expropriated;

3. That the said the Province of Ontario do pay to the said F. W. Sutherland the sum of \$670.00 by reason of the damages occasioned to the remainder of the land of the said F. W. Sutherland, and for severance through the removal of the building from the said lands heretofore rented by the said Applicant as above mentioned;

4. That the Province of Ontario do pay to the said F. W. Sutherland the sum of \$140.00, being 10% of the value of the land and building added by reason of the forcible taking of the said property, and in addition thereto that the Province of Ontario shall pay to the said F. W. Sutherland interest at the rate of 5% per annum on the said amount of \$2,210.00 from the date of expropriation to the date of payment thereof;

5. That the said Province of Ontario shall pay to the said F. W. Sutherland his costs fixed at \$100. and shall pay the sum of \$25.00 for Law Stamp, the Board's tariff fee herein.

In witness whereof the Members of The Ontario Railway and Municipal Board have hereto set their hands and caused to be affixed hereto the seal of the said Board this 26th Day of June, A.D., 1929, at the City of Toronto, in the Province of Ontario.

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

(Sgd.) J. A. ELLIS,
Commissioner.

PROCEDURE FILE A-2210.

In the matter of sections 56 and 59 of "The Highway Improvement Act" (R.S.O., 1927, Chapter 54) and

In the matter of section 28 of "The Public Works Act", (R.S.O., 1927, Chapter 52) and

In the matter of compensation to be paid to the Owner, T. J. Chamberlain, in respect of part Block "Y" and part Block "Z", Registered plan 2130, (Drawing No. 1627).

April 17th. Reference filed by the Honourable the Minister of Public Highways.

May 13th. Hearing adjourned to 17th inst., at 10 A.M.

May 17th. Hearing adjourned 'sine die' at request of Counsel.

PROCEDURE FILE A-2211.

Application by The Tuckersmith Municipal Telephone System, under section 103 of "The Municipal Act" for authority to increase charges for service.

April 17th. Application filed.

May 15th. Hearing, pursuant to Appointment, 1.15 to 2.15 P.M., Town Hall, Clinton. Application granted.

June 4th. Order.

June 4th, 1929.

ORDER

Upon the application of the above named Applicant, upon hearing the evidence adduced on behalf of all parties, upon reading Statements of Assets and Liabilities, Receipts and Disbursements and other material filed,

The Board orders that the Applicant, the Municipality of Tuckersmith, be authorized to charge the following rates for telephone service, to take effect as from January 1st, 1929:

To Subscribers	\$15.00 per annum.
To Persons not being subscribers as defined by Subsection (h) of Section 1 of "The Telephone Act" (R.S.O., 1927, c. 227)	\$15.00 per annum.

The Board further orders that the charges herein authorized shall include the cost of such battery renewals as may be necessary to maintain the provision of an efficient service by the Applicant at all times.

And the Board makes no order for costs, save and except that the Applicant shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2213.

Application by the Town of Port Colborne, under section 398 (2b) of "The Municipal Act", for approval of its By-law No. 36 (1929) amending its Restricted Area By-law No. 28 (1924) by eliminating therefrom section "C" of said By-law, being all that portion of the Town lying east of the centre line of Fares Street, north of The Buffalo & Goderich Branch of the Canadian National Railways.

April 17th. Application filed.

May 21st. Hearing, pursuant to Appointment, 11.15 to 11.30 A.M., Council Chamber, Port Colborne. (Affidavit to be filed showing change in district).

May 27th. Further material filed as directed.

May 29th. Application granted. Applicant's Solicitor to draft Order.

June 4th. Draft Order filed.

June 4th. Order issued.

May 29th, 1929.

ORDER

Upon the application of the said Corporation, and upon reading the Affidavit of Howard F. Johnston, Clerk of the said Town, the copy of the said By-law, the Affidavit of Laura Lewis as to service of Notices under the provisions of section 398 (2b) of "The Municipal Act", and upon hearing the Solicitor for the said Corporation, no one opposing,

The Board orders, under and in pursuance of the provisions of "The Municipal Act", R.S.O., 1927. Section 398, subsection (2b), that the said By-law Number 36 (1929) intituled "By-law No. 36 1929. A By-law of the Council of

"the Municipal Corporation of the Town of Port Colborne amending by-law No. "28 for the year 1924 being a by-law passed on the 2nd day of June, 1924, for "the purpose of establishing certain restricted districts or zones within the corporate limits of the said Town and approved of by the Ontario Railway and "Municipal Board on the 23rd day of July, 1924", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2215

In the matter of the Application of the Corporation of the City of Ottawa, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law Number 6618, being a By-law to restrict the use of land and the erection and use of buildings on land abutting on part of Carling Avenue in the said City.

April 18th. Application and material filed.

April 20th. Certified copy of By-law 6616, repealing 6571, filed.

May 23rd. Hearing, pursuant to Appointment, 10 to 10.15 A.M., Council Chamber, Ottawa. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.).

May 27th. Report of Mr. Commissioner Ellis filed and adopted. Application granted.

May 29th. Draft Order filed.

May 29th. Order issued.

REPORT OF MR. COMMISSIONER ELLIS.

The By-law appearing to be in order, proof of Notice having been filed, and no one opposing, I recommend that the By-law be approved.

(Sgd.) J. A. ELLIS,
Commissioner.

23rd May, 1929.

Adopted as the basis of the

Order of the Board,

Toronto, 27th May, 1929.

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

May 23rd, 1929.

ORDER

The application of the Corporation of the City of Ottawa, under section 398 of "The Municipal Act", for approval of its By-law Number 6618 restricting the use of land and the erection and use of buildings on land abutting on part of Carling Avenue in the City of Ottawa and more particularly described in the said By-law, having come on to be heard before Mr. Commissioner Ellis, duly authorized to hear the said Application and to report to the Board thereon, as provided by

section 8 of The Railway and Municipal Board Act, at the Council Chamber in the City Hall, Ottawa, on Thursday, the 23rd day of May, A.D., 1929, pursuant to an Appointment given by the Board and dated the 18th day of April, 1929, and it appearing that Notice of the said Appointment had been duly served upon the owners of all property affected thereby by mailing thereto a copy of the said appointment and of the said By-law by registered letter, at least ten clear days before the date fixed for the said Hearing, and no one appearing in opposition to the said By-law at the said Hearing, and the said Commissioner having reported to the Board under date of the 23rd day of May, 1929, in favor of the granting of such approval, and the said Report having been adopted as a basis of the Board's Order,

1. The Board hereby approves of said By-law Number 6618.

2. And the Board directs that the Corporation shall affix Law Stamps to the value of Ten Dollars (\$10.00) to this Order as the Board's fee upon the said Hearing.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2224

In the matter of section 548 of "The Municipal Act", and

In the matter of Forms approved by the Board thereunder for use on submission of a By-law or question to votes of electors under section 269 and following sections of said Act; also Form to borrow money by the issue of debentures on the instalment plan.

April 25th. Order approving the above Forms issued.

April 25th, 1929.

ORDER

In the exercise of the powers vested in The Ontario Railway and Municipal Board by Section 548 of "The Municipal Act," the annexed Forms of By-laws and Notices to be passed or given in carrying out the provisions of the said Act relative to voting on By-laws, and borrowing money by the issue of debentures are hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

FORM NO. 1

BY-LAW No. --

A By-law to provide for taking the votes of the electors on a proposed Money By-law entitled (here set out the short title of the proposed By-law).

Passed the day of A.D. 19

Whereas a proposed Money By-law of the Corporation of the
of entitled (here set out the short title of the proposed By-law) re-
quires for its validity the assent of the electors, and it is expedient and necessary

to pass this By-law for the purpose of enabling the electors to vote on the proposed By-law ;

Be it therefore enacted by the Municipal Council of the Corporation of the
of as follows:—

*1. The votes of the electors of the said Corporation shall be taken on the said proposed By-law on the day of A.D. 19 , between the hours of nine o'clock in the forenoon and five o'clock in the afternoon at the following places, and by the following Deputy-Returning Officers and Poll Clerks, namely: (here set out the polling places and the names of the Deputy-Returning Officer and Poll Clerks).

2. On the day of A.D. 19 , at the hour of o'clock in the noon, the head of the Council of the said Corporation or some member of said Council appointed for that purpose by resolution shall attend at in the said Municipality for the purpose of appointing, and, if requested so to do, shall appoint by writing signed by him, two persons to attend at the final summing up of the votes by the Clerk, and one person to attend at each polling place on behalf of the persons interested in and promoting the proposed By-law, and a like number on behalf of the persons interested in and opposing the proposed By-law.

3. On the day of A.D. 19 , at the hour of o'clock in the noon, at , in the said municipality, the Clerk of the said municipality shall attend and sum up the votes given for and against the proposed By-law.

*Note.—When a proposed By-law is submitted on the day of the annual election for the Municipal Council, the following shall be substituted for Section 1 of the foregoing By-law:—

1. The votes of the electors of the said Corporation shall be taken upon the said proposed Money By-law at the same time and at the same places as the annual election for the Municipal Council, and the Deputy-Returning Officers appointed to hold said election shall take the vote.

Note.—When advance Poll held the provisions of C. 44, Ont. Stats. 1923 (as amended by C. 55, Ont. Stats. 1924 and C. 60, Ont. Stats. 1925) must be complied with.

FORM NO. 2

BY-LAW No. —

A By-law to provide for taking the votes of the electors on the following question: (here state question).

Passed the day of A.D. 19

Whereas it is considered desirable and expedient to obtain the opinion of the electors on the following question: (here state question), and to pass this By-law for the purpose of enabling the electors to vote on said question ;

Be it therefore enacted by the Municipal Council of the Corporation of the
of as follows:—

1. The votes of the electors of the said Corporation shall be taken on the said question on the day of A.D. 19 , between the hours of nine o'clock in the forenoon and five o'clock in the afternoon at the

following places, and by the following Deputy-Returning Officers and Poll Clerks, namely: (here set out the polling places and the names of the Deputy-Returning Officers and Poll Clerks).

2. On the day of A.D. 19 , at the hour of o'clock in the noon, the head of the Council of the said Corporation or some member of said Council appointed for that purpose by resolution shall attend at in the said Municipality for the purpose of appointing, and, if requested so to do, shall appoint by writing signed by him, two persons to attend at the final summing up of the votes by the Clerk, and one person to attend at each polling place on behalf of the persons interested in and voting in the affirmative on said question and a like number on behalf of the persons interested in and voting in the negative on said question.

3. On the day of A.D. 19 , at the hour of o'clock in the noon, at , in the said municipality, the Clerk of the said municipality shall attend and sum up the votes given in the affirmative and negative on the question.

Note.—When a question is submitted to obtain the opinion of the electors on the day of the annual election for the Municipal Council, the following shall be substituted for section numbered 1 of the foregoing By-law:—

1. The votes of the duly qualified electors of the Corporation of the of shall be taken on the said question at the same time and at the same place as the annual election for the Municipal Council, and the Deputy-Returning Officers appointed to hold said election shall take the vote.

FORM NO. 3

Notice to be published with a copy or synopsis of a proposed by-law.

NOTICE.

*Take notice that the foregoing is a true copy or synopsis (as the case may be) of a proposed By-law of the Corporation of the of to be submitted to the votes of the electors on the day of A.D. 19 , between the hours of nine o'clock in the forenoon and five o'clock in the afternoon at the following places:

(here state the polling places).

And that the day of A.D. 19 , at o'clock in the noon at in the said municipality has been fixed for the appointment of persons to attend at the polling places, and at the final summing up of the votes by the Clerk.

And that if the assent of the electors is obtained to the said proposed By-law it will be taken into consideration by the Municipal Council of the said Corporation at a meeting thereof to be held after the expiration of one month from the date of the first publication of this notice, and that such first publication was made on the day of A.D. 19 .

Clerk.

Note 1.—In the case of a Money By-Law the notice shall contain in addition the following:

Take notice further that a tenant who desires to vote upon said proposed By-law must make and file with the Clerk not later than the tenth day before the day appointed for taking the vote a declaration under The Canada Evidence Act, that

he is a tenant whose lease extends for the time for which the debt or liability is to be created, or in which the money to be raised by the proposed By-law is payable, or for at least twenty-one years, and that he has by the lease covenanted to pay all municipal taxes in respect of the property of which he is a tenant other than local improvement rates.

*Note 2.—Where the vote is taken at the same time as the annual municipal election the first paragraph may read:—

Take notice that the foregoing is a true copy or synopsis (as the case may be) of a proposed By-law of the Corporation of the _____ of _____ to be submitted to the votes of the electors at the same time and at the same places as the annual election for the Municipal Council, and the Deputy-Returning Officers appointed to hold the said election shall take the vote.

FORM NO. 4

Notice to be published with a statement of a question submitted.

NOTICE.

Take notice that the foregoing is a correct statement of the question to be submitted to the votes of the electors on the _____ day of _____ A.D. 19____, between the hours of nine o'clock in the forenoon and five o'clock in the afternoon at the following places:

(here state the polling places).

And that the _____ day of _____ A.D. 19____, at _____ o'clock in the _____ noon, at _____ in the said municipality has been fixed for the appointment of persons to attend at the polling places, and at the final summing up of the votes by the Clerk.

Clerk.

Note.—Where the vote is taken on the date of the annual election for the Municipal Council the first paragraph of the foregoing notice may read:—

Take notice that the foregoing is a correct statement of the question to be submitted to the votes of the electors at the same time and at the same places as the annual election for the Municipal Council, and the Deputy-Returning Officers appointed to hold the said election shall take the vote.

PROCEDURE FILE A-2227 P.581

Application by Robert Home Smith, Owner, under "The Planning and Development Act", for approval of plan of Lots Numbered 10 to 16, Con. "B", and Lots 10 to 13, Con. "C", Township of Etobicoke, Co. York.

April 26th. Application filed.

May 9th. Hearing, pursuant to Appointment, 10.30 to 11.30 A.M., at Board's Chambers. Adjourned to 11th June, 1929, at 10.30 A.M., at the Board's Chambers (pending proceedings by Township Etobicoke, et al, re Subway).

June 11th. Hearing continued, 10.30 A.M.: 11.15 to 11.30 A.M. Adjourned to 24th June, at 10.30 A.M. (D.S.T.) at Board's Chambers.

June 24th. Hearing continued, 10.30 to 10.45 A.M. City consents to Plan. Board will approve on presentation of formal plan; certified copy of City Council's Minutes approving plan to be filed.

July 18th. Certified copy of Minutes of City Council filed.

July 29th. Plan approved and certified.

PROCEDURE FILE A-2228. (P.584)

Application by the Township of Sandwich West, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 836 (Areas 1, 2 and 3, as described in the said By-law).

April 29th. Application and copy of By-law filed.

May 28th. Hearing, pursuant to Appointment, 10 A.M. to 12 M., Township Hall, Malden Road, Township Sandwich West. Application granted.

June 18th. Further Hearing, on application of Right Rev. M. F. Fallon. Judgment reserved. Written Argument to be submitted.

June 26th. Written Argument filed by Applicant.

June 27th. Written Argument filed by Mr. Springsteen (Council for Bishop Fallon).

July 15th. Judgment delivered.

Aug. 30th. Amending By-law No. 854 filed.

In the matter of the Application of the Township of Sandwich West for approval of its By-law No. 836, being a By-law to regulate the use of lands or the erection or use of buildings in certain areas of the Township.

JUDGMENT

This was an application heard by The Ontario Railway and Municipal Board at the Township Hall of Sandwich West on Tuesday, the 28th day of May, 1929, Mr. C. R. McKeown, K.C., Chairman, and Mr. A. B. Ingram, Vice-Chairman, of the Board being present. At this Hearing the Applicants were represented by Mr. A. Racine of Windsor.

The application was for the approval of By-law No. 836 of the Township of Sandwich West, being a by-law to regulate the use of lands or the erection or use of buildings within a large area of the Township set out in the said by-law by metes and bounds.

The by-law itself is not as restrictive as the usual residential by-law is supposed to be, inasmuch as the following buildings are allowed to be erected at any place within the area mentioned.

1. A single detached private residence and garage;
2. Multiple dwelling houses;
3. Apartment houses;
4. Churches;
5. Schools;
6. Institutions of learning;
7. Clubs;
8. Gasoline stations and garages for storage of cars;
9. Theatres;
10. Business buildings comprising offices for general or professional business or stores;
11. Hotels.

On the said 28th day of May, although a number of those interested in the by-law were present no one offered any opposition to its passing, save and except one resident farmer who felt that he should be entitled to sell his property for anything that he wished to be erected thereon, and upon enquiry being made by

the Board as to whether or not there was any other opposition to the passing of the by-law no such opposition appeared, and it was assumed that the matter was meeting with general approval, and the Board intimated that under these circumstances the by-law might be approved by the Board as soon as the draft Order was forwarded for the signature of the Chairman.

Under the Act it is necessary that all assessed owners of property in the area affected shall be notified of the application, and this requirement, from the evidence filed with the Board, was complied with, and it was not the duty of the representative of the applicants nor of anyone else supporting the by-law to explain to the Board any opposition that might develop or be forthcoming from any quarter.

Before the Order was made, however, there was an intimation given to the Board that subsequent to the revision of the Assessment Roll a large tract of land, namely, 76 acres within the area proposed to be restricted had been purchased for cemetery purposes, and that the purchaser not being an assessed owner had received no notice of the Hearing, and was therefore unaware of the application to the Board for its approval.

The Board, therefore, feeling that one so vitally interested as the owners of the cemetery land should have an opportunity to be heard in this matter, reopened the Hearing and attended at Windsor on Tuesday, the 18th day of June, 1929, with Mr. J. H. Rodd, K.C. appearing as counsel for Bishop Fallon representing the owners of the cemetery property in opposition to the approval of the by-law, and Mr. S. L. Springsteen, appeared in company with Mr. A. Racine supporting the Township's application.

Much evidence was taken and written argument has been filed by the different parties in support of the different contentions. The facts appear to be very much as follows:

Windsor, and the vicinity of Windsor, has grown very rapidly within the last few years, and the expectation of many of those interested in real estate look forward to a very much greater growth in the future. On this account a large part of the surrounding country now being used as farm land has been purchased by those interested in real estate, subdivided into town lots, and some of these lots placed upon the market and some sold.

Mr. Springsteen in his argument on behalf of the Applicants says that it is the desire of the municipality to create in the territory set out in the by-law a highly restricted residential area, but if that is the intention the by-law hardly carries that intention into effect because of the many concessions being made throughout the territory as to the erection of other than private residences. It is quite permissible within the terms of the by-law to erect a very expensive private residence, and immediately adjacent thereto erect a theatre or a gasoline station, so that the by-law itself does not create a highly residential district.

Mr. Springsteen further says, and rightly so, that the question for this Board to consider very seriously is not whether there should be created a cemetery within the area intended to be restricted, but whether the by-law is in itself a reasonable by-law. With all the facts now before the Board that question the Board will endeavor to answer to the best of its ability. There is evidence that the Roman Catholic cemeteries within the City of Windsor, and in the near vicinity, will not very much longer accommodate those whom the representatives of the Roman Catholic church will be called upon to bury.

While men are living men are dying, and while it is necessary to look after the interests of the living we must, in the present state of our civilization, make some provision for the dead, and on this account a cemetery is looked upon by us as one of the necessities.

Bishop Fallon, as representing the diocese of London in connection with the Roman Catholic church, took this matter into consideration, and after looking over other properties which, in his opinion, were not suitable for the purposes of a cemetery, purchased what was known as the Vellans Farm, some 76 acres, for \$71,000. The purposes of this purchase were the establishment of a very beautiful cemetery, and the caring for the dead of Windsor and its vicinity by the Roman Catholic Church in a place removed some four or five miles from the limits of the City of Windsor.

Although the subdivision of lots for city purposes by real estate agents has extended quite a long distance beyond the City of Windsor, reaching for some miles into the country, the land purchased for cemetery purposes above set out, goes beyond any of these subdivisions. It is contended by the owners of the subdivisions that the establishment of a cemetery will to a certain extent reduce the value of their subdivided properties, and there may be some truth in this contention, but if a cemetery is to be located any place it will in all probability have a similar effect upon the property immediately adjacent thereto, but if the cemetery now under consideration is laid out in the way in which the architect intimated to this Board is the intention of the Bishop and those having the matter in charge, instead of being a detriment to the surrounding property, it will possibly enhance its value. This, however, is more a matter on which the real estate man, the owners of the property, can express a better opinion than any member of this Board.

There are at the present time two cemeteries just outside the area intended to be restricted, and if any subdivided properties are injured in value by reason of the cemetery intended to be established the same properties will, possibly to a somewhat lesser extent, be injured by the cemeteries now in existence.

It is admitted that the object of the by-law was to prevent the establishment of a cemetery in the district mentioned, and after knowing all the circumstances, hearing the evidence, and reading the arguments of counsel for the different persons interested, this Board is of the opinion that the restricting by-law referred to, not being a restricting by-law as to private residences inasmuch as almost everything is allowed within the area except a cemetery and a manufacturing industry, and evidently having been passed for the purpose of preventing the establishment of the very cemetery for which the property in question was purchased, the Board cannot come to the conclusion that the by-law is a reasonable by-law, and must therefore refuse to give it the approval requested.

If the municipality of the Township of Sandwich West sees fit to amend its by-law by omitting from the operation thereof that property purchased for cemetery purposes and herein referred to, this Board will be pleased to give to such amended by-law its approval.

The Board makes no order for costs, save and except that the Township of Sandwich West shall pay \$30.00 the Board's tariff fee for Law Stamps herein.

Dated at Toronto this Fifteenth Day of July, A.D. 1929.

(Sgd.) C. R. McKEOWN,
Chairman.

I agree:

(Sgd.) A. B. INGRAM,
Vice-Chairman.

PROCEDURE FILE A-2238

Application by Town of Ford City, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law Number 892 amending its Restricted Area By-law No. 647 to permit the erection of duplex, semi-detached bungalow or double residence or a detached private residence, instead of only a detached private residence, on Dawson Road, Lawrence Road or Raymo Road—between Ottawa Street and Canadian Pacific Railway Right-of-Way.

May 2nd. Application and copy of By-law 892 filed.

May 28th. Hearing, pursuant to Appointment, 9 to 9.50 A.M., Council Chamber, Ford City. By-law 898 (in lieu of 892) filed. Application granted. Applicant's Solicitor to draft Order.

May 29th. Draft Order filed.

May 31st. Order issued.

May 28th, 1929.

ORDER

Upon the application of the said Corporation and the Board having, pursuant to Appointment, at the Council Chamber, in the Town of Ford City, this 28th day of May 1929, heard Counsel for the Applicant, no one appearing in opposition thereto although due Notice of such Application was duly given to all Parties affected, as directed by the Board, and upon consideration of each of the said By-laws and the other material filed.

The Board orders, under and in pursuance of the provisions of section 398 of "The Municipal Act," that the said By-law Number 898, intituled "By-law "Number 898. A By-law to repeal By-law Number 892 of the Town of Ford "City and to amend By-law Number 647", be and the same is hereby approved and ratified.

And the Board makes no order as to costs except that the Applicants pay a fee of \$15.00 for Law Stamp herein.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2239

Application by the Township of East York, under 15 Geo. V, Chapter 119, Ontario Statutes, 1925, for approval of its By-law No. 1386—setting aside a defined area to be known as "Waterworks Area Section "E" ".

May 3rd. Application and material filed.

May 20th. Hearing, pursuant to Appointment, 10.30 to 10.45 A.M., at Board's Chambers. Application granted—Applicant's Solicitor to draft Order.
 May 22nd. Draft Order filed.
 May 23rd. Order.

May 20th, 1929.

ORDER

Upon the application of the said Corporation, and the Board having, pursuant to Appointment, on the 20th day of May, 1929, heard Counsel for the Applicant and no one appearing in opposition to the said By-law—Notice of such Appointment having been duly given as directed by the Board, and the Board having granted the Application of the said Township.

The Board orders, under and in pursuance of the provisions of Section 11 of the Township of East York Act, 1925, that the said By-law No. 1386, entitled "By-law No. 1386. A By-law to set apart and establish as a water area, a portion of the Township of East York", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2245 (P.576)

Application by the City of Toronto, under section 3 of "The Planning and Development Act", for approval of a variation of its urban zone.

May 9th. Application and plan filed.

June 11th. Hearing, pursuant to Appointment, 10.30 to 11.15 A.M., at Board's Chambers. Plan to be amended in Township of Scarborough as directed by the Board. Amended plan to be filed. Applicant's Solicitor to draft Order (if he desire one to issue).

Oct. 4th. Amended plan filed.

Oct. 4th. Amended plan certified.

PROCEDURE FILE A-2246

Between:

The Corporation of the City of Hamilton

Applicant,

—and—

The Hamilton Street Railway Co.,

Respondent.

(Performance of Agreement—dated May 25th, 1926—Section 4 (a)—Double track on King Street, from Ottawa Street to Kenilworth Avenue.)

May 10th. Application filed.

June 10th. Hearing, pursuant to Appointment, 10.45 A.M. to 12.50 P.M.—Council Chamber, Hamilton. Judgment reserved.

June 15th. Judgment delivered.

JUDGEMENT

In the matter of the Application of the Corporation of the City of Hamilton for an Order compelling The Hamilton Street Railway Company to remove its present single track and substitute a double track on King Street between Ottawa Street and Kenilworth Avenue.

The Board, having given its Judgment in the matter of the application of The Hamilton Street Railway Company regarding the single track referred to herein, disposes for the time being of the necessity of double tracking on King Street between Ottawa Street and Kenilworth Avenue, therefore this Application is dismissed.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

Toronto, June 15th, 1929.

PROCEDURE FILE A-2248

Application by the Township of East Whitby, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 1043—Simcoe Street—being allowance for road between Lots 10 and 11, Con. III) extending northerly from the southerly limits of said Lots 1722 feet—to detached private residences.

May 11th. Application and material filed.

June 14th. Hearing, pursuant to Appointment, 10 A.M. to 12 M., Council Chamber, City Hall, Oshawa. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.)

June 17th. Report of Mr. Commissioner Ellis filed and adopted.

July 17th. Copy of By-law 1047, amending By-law 1043, filed.

July 17th. Draft Order filed.

July 17th. Order issued.

REPORT OF MR. COMMISSIONER ELLIS

I heard this Application at the City of Oshawa on the 14th inst., pursuant to Appointment, duly authorized under section 8, Chapter 225, R.S.O.

There are 26 property owners in the area affected, 16 of whom had petitioned the Township Council to pass the By-law. At the Hearing a Petition against the application was presented, signed by 15 property owners, 7 of whom had previously signed the original petition. However, at the Hearing only one of the opposing property owners appeared, viz., Philip Conlin, who owns a lot on the corner of Simcoe Street. A number of other persons appeared in support of the application.

It was suggested that the Township Council might amend the By-law so as to allow Mr. Conlin to erect on his lot any residential or business premises, but not premises to be used for a gas or service station or a public garage.

I recommend that the application be granted, and that if the By-law be amended as above mentioned the amending By-law be also approved.

Respectfully submitted,

(Sgd.) J. A. ELLIS,

Commissioner.

Dated at Toronto June 17th, 1929.

Adopted:

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

July 17th, 1929.

ORDER

Upon the application of the said Corporation, and Mr. Commissioner Ellis, duly authorized under section 8, Chapter 225, R.S.O., 1927, having, pursuant to Appointment, at the Council Chamber, in the City Hall, in the City of Oshawa, heard Counsel for the Applicant and several members of the Township Council and certain property owners in support of the Application, and Mr. Phillip Conlin, a property owner, opposing the By-law, and upon consideration of the Report of Mr. Commissioner Ellis, dated the 17th day of June, 1929, which Report has been adopted as the basis of this Order, and amending By-law (Number 1047) having been filed as directed by the said Report.

The Board orders, under and in pursuance of the provisions of section 398 of "The Municipal Act", that the said By-law Number 1043, intituled "A By-law "to restrict the erection of buildings to that of detached private residences on part of Simcoe Street in the Township of East Whitby", as amended by the said By-law Number 1047, be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman,

PROCEDURE FILE A-2261

In the matter of the Application of the Corporation of the City of Ottawa, under section 398 of "The Municipal Act", for approval of its By-law Number 6640 prohibiting the use of land and the erection and use of buildings within the area therein defined for any purpose other than that of a detached private dwelling.

May 17th. Application and copy of By-law filed.

June 15th. Hearing, pursuant to Appointment, 10 to 10.15 A.M., Council Chamber, City Hall, Ottawa. Application granted—City Solicitor to draft order.

July 17th. Draft Order filed.

July 18th. Order issued.

June 15th, 1929.

ORDER

The Application of the Corporation of the City of Ottawa under section 398 of "The Municipal Act", for approval of its By-law Number 6640 prohibiting

the use of land and the erection and use of buildings within the area therein defined, for any purpose other than that of a detached private dwelling, having come on for hearing before the Board at a special sittings thereof held at the City of Ottawa on Saturday, the 15th day of June, 1929, at the hour of Ten O'clock in the Forenoon (Daylight-saving time) pursuant to an appointment duly issued by the Board and dated the 20th day of May, A.D., 1929, in the presence of the Clerk of the said Corporation and the Solicitor thereof and of certain parties interested in obtaining the approval of the Board to the said By-law; Upon it appearing that notice of the said hearing had been duly given to all owners whose property would be affected thereby, pursuant to the provisions of subsection (2) (c) of section 398 of "The Municipal Act", and upon hearing what was alleged in support of the said application and no one appearing in opposition thereto,

1. The Board doth hereby approve of the said By-law Number 6640 entitled "A By-law of the Corporation of the City of Ottawa for prohibiting the use of land and the erection and use of buildings within the area herein defined, for any purpose other than that of a detached private dwelling".

2. The Board hereby orders and directs that the said Corporation shall affix to the said Order Law Stamps to a value of \$15.00 as the Board's tariff fee upon the said application.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2265

Application by R. H. Green, under section 102 of "The Telephone Act", for approval of sale of telephone system formerly owned and operated by The Zorra Telephone Co., Ltd., to The Bell Telephone Co. of Canada, Ltd.

May 20th. Application filed. (See also A-2140).

June 4th. Hearing, pursuant to Appointment, 2. to 2.30 P.M., at Board's Chambers. Application granted.

June 5th. Order.

June 5th, 1929.

ORDER

Upon the application of the above named Applicant, in the presence of the Applicant and other parties interested, upon hearing the evidence adduced on behalf of the Applicant and other parties interested, and upon reading the said application and other material filed.

The Board orders, pursuant to Section 102 of "The Telephone Act" (R.S.O. 1927, c. 227), that the sale by the Applicant to The Bell Telephone Company of Canada of the Telephone System formerly owned and operated by the Zorra Telephone Company, Limited, and located in the Township of East Nissouri, East Zorra and West Zorra, in the County of Oxford", be and the same is hereby approved.

And the Board makes no order for costs, save and except that the Applicant shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2267

Application by the City of Toronto, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law No. 12188, repealing its Restricted Area By-law No. 8834 in so far as it prevents the conversion of No. 14 Prince Arthur Avenue into a duplex dwelling house.

May 21st. Application and material filed.

June 17th. Hearing, pursuant to Appointment, 11 to 11.10 A.M., at Board's Chambers. Application granted—City Solicitor to draft Order.

June 19th. Draft Order filed.

June 21st. Order issued.

June 17th, 1929.

ORDER

The application of the Corporation of the City of Toronto, pursuant to section 398, subsection (2b) of "The Municipal Act", being R.S.O., 1927, Chapter 233, for approval of its By-law Number 12188 having come on for hearing by appointment before this Board on Monday, the 17th day of June, A.D., 1929, in the presence of a number of property owners affected, and no one appearing for the other property owners although duly notified as by proof of service filed appears, upon reading the said By-law and other material filed, and upon hearing what was alleged by Counsel for the said Corporation, and it appearing that there was no opposition to the application of the said Corporation.

The Board orders, under and in pursuance of section 398, subsection (2b) of "The Municipal Act", being R.S.O., 1927, Chapter 233, that By-law No. 12188, being intituled "No. 12188. A By-law to repeal By-law 8834 in so far as it prevents the conversion of No. 14 Prince Arthur Avenue into a duplex dwelling "house", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2289

Application by the City of Kitchener, under section 490 (2) of "The Municipal Act", for approval of its By-law Number 2083—establishment of a lane, to be known as "Hall's Lane", between Benton and Eby Streets.

May 23rd. Application and material filed.

June 12th. Hearing, pursuant to Appointment, 10.15 to 11 A.M., Council Chamber, Kitchener. Application dismissed.

PROCEDURE FILE A-2290

Application by City of Kitchener, under section 398 (2b) of "The Municipal Act", for approval of its By-law No. 2087, amending its Zoning Ordinance By-law No. 1823 (as amended by By-laws Nos. 1834 and 1835) by adding certain business districts (Section 4) to Division "C".

May 23rd. Application and copy of By-law filed.

June 12th. Hearing, pursuant to Appointment, 10.15 to 11 A.M., Council Chamber, Kitchener. Application granted—Applicant's Solicitor to draft order.

June 13th. Draft Order filed.

June 13th. Order issued.

June 12th, 1929.

ORDER

Upon the application of the said Corporation, and upon reading the copy of each of the said By-laws and the other material filed and the Board having this day, pursuant to Appointment at the Council Chamber in the City of Kitchener, heard all parties interested, no one appearing in opposition to the application, although public notice of the Hearing was duly given as directed by the Board,

The Board orders, under and in pursuance of the provisions of section 398 of "The Municipal Act", that the said By-law No. 2087, being a By-law to amend the zoning ordinance be, and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2291

Application by the Village of Forest Hill, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 358—restricting lands fronting on Hilltop Road, between Hopewell Ave. and Eglinton Ave., and on Wembley Road and Whitmore Ave., east of Cheyne Ave.

May 23rd. Application and material filed.

June 27th. Hearing, pursuant to Appointment—10.30 to 10.45 A.M., at Board's Chambers. By-law to be amended to allow as to Lot 45, Plan 1850—2 parts—36' 9" and 36' (2 houses); Lot 108, Plan 1850—40' (1 house); Lot 109, Plan 1850—40' (1 house).

Oct. 26th. Amending By-law No. 419 filed.

Oct. 26th. Draft Order filed.

Oct. 28th. Order issued.

Oct. 28, 1929.

ORDER

Upon application of the said Corporation; upon reading the material filed by Melville Grant, Esq., Solicitor for the Applicant, and upon hearing what was alleged by Counsel for the Applicant and no one appearing to oppose the said application although public notice of the hearing of the same was duly given as provided by Statute and directed by the Board.

The Board orders, under and in pursuance of Section 398 of "The Municipal Act", being Chapter 233 of the Revised Statutes of Ontario (1927), that the said By-law No. 358, intituled "By-law Number 358. A By-law to place "restrictions on the lands fronting on Hilltop Road between Hopewell Avenue and Eglinton Avenue and on Wembley Road and Whitmore Avenue East of Cheyne Avenue", as amended by By-law 419, intituled "By-law Number 419. "A By-law to amend By-law No. 358, affecting lands on part of Hilltop Road, "Wembley Road and Whitmore Avenue", be and the same is hereby approved.

And the Board doth make no Order as to costs except for the payment by the Applicant Corporation of the fee of Ten Dollars for Law Stamps payable on the Order herein.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2292

Application by the Village of Forest Hill, under section 398 of "The Municipal Act", for approval of its By-law No. 362, amending its Industrial By-law No. 112—to prevent the establishment of road-making plants.

May 23rd. Application and material filed.

June 27th. Hearing, pursuant to Appointment, 10.30 A.M. to 12.30 P.M., at Board's Chambers—Adjourned to Tuesday, July 16th, 1929, at 11 A.M., at Board's Chambers.

July 16th. Hearing continued, 11 to 11.15 A.M. Adjourned to 10.30 A.M., Wednesday, Sept. 18th, 1929, in presence of and at request of Council for parties interested.

Sept. 18th. Hearing continued, 10.30 to 10.40 A.M. Adjourned at request of Counsel to 16th October, 1929, at 10.30 A.M., at Board's Chambers.

Oct. 16th. Hearing continued, 10.30 A.M.: 10.45 A.M. to 11.45 A.M. Application dismissed.

PROCEDURE FILE A-2293

In the matter of the Petition of Alfred Gillen and others, under section 8 of "The Local Improvement Act", against the apportionment of cost of pavement on Dundas Street East, City of Belleville.

May 23rd. Petition filed.

June. 21st. Hearing, pursuant to Appointment, 12 M. to 1 P.M., Council Chamber, Belleville. Payment to be paid for at rate of 50% by City and 50% by property owners. (Laterals—water, gas, sewers, etc., not to be changed as to cost and properties).

PROCEDURE FILE A-2294

In the Matter of the Application of the Corporation of the City of Ottawa, under section 44 of "The Municipal Act", for approval of the redivision of Wards of the said City, viz.:—change of boundaries of Wards lying west of Rideau Canal and creation of two new Wards—Elmdale and Riverdale.

May 27th. Application and material filed.

June 10th. Objection by W. J. Bedder filed.

June 15th. Hearing, pursuant to Appointment, 10 A.M.:10.15 to 11 A.M., Council Chamber, Ottawa. Application granted. City Solicitor to draft Order.

June 19th. Draft Order filed.

June 19th. Order.

Nov. 2nd. Application for amendment of Order of June 15th, 1929.

Nov. 7th. Draft amending Order filed.

Nov. 7th. Amending Order issued.

June 15th, 1929.

ORDER

Upon the Application of the Corporation of the City of Ottawa, and upon reading the Resolution of the Municipal Council of the said Corporation, passed at a meeting thereof held on the 20th day of May, 1929, by a vote of upwards of

two-thirds of all the members thereof, affirming the expediency of a new division into wards of a part of the said City, as more particularly set out in the said resolution, a true copy whereof is filed of record with the Board, and upon reading the statutory declaration of Norman H. H. Lett, Esq., City Clerk, that the appointment for the said hearing of the said application had been duly advertised once a week for three successive weeks in a local newspaper having a general circulation in the said city; and upon hearing what was alleged in support of the said application, and no one appearing in opposition thereto;

1. The Board orders and directs that four new wards be established in the said City to be known respectively as "Dalhousie Ward", "Elmdale Ward", "Capital Ward" and "Riverdale Ward".

2. That Elmdale ward be created out of that certain area now forming part of Dalhousie Ward which is bounded as follows: On the North by Wellington Street; on the East by Preston Street; on the South by Carling Avenue and on the West by the Westerly limit of the said City.

3. That Dalhousie Ward shall hereafter be bounded as follows: On the North by Wellington Street; on the East by Bronson Avenue; on the South by the Southerly limit of the said City (which at such place is coterminus with the Rideau Canal) and on the West by the right-of-way of the Canadian Pacific Railway Company, by that part of Carling Avenue which lies between the said right-of-way and Preston Street, and by that part of Preston Street which lies North of Carling Avenue.

4. That Capital Ward be subdivided in such manner as to establish two new wards to be known respectively as "Capital Ward" and "Riverdale Ward".

5. That the boundaries of Capital Ward after such division shall be as follows: On the North by the Southerly limit of the right-of-way of the cross-town tracks of the Canadian National Railway Company; on the East and South by the Rideau Canal and on the West by Bronson Avenue.

6. That the boundaries of Riverdale Ward shall be as follows: On the North by the Rideau Canal and a line drawn from the Southerly limit of Mann Avenue in a Westerly direction and parallel thereto to the intersection of the Rideau Canal; on the East by Hurdman's Road and the Rideau River; on the South by the Rideau River and on the West by Bronson Avenue.

7. The Board further orders and directs that each of the said new wards be represented in the City Council by two Aldermen.

8. The Board further orders and directs that all necessary changes be made in the Voter's List for the said City, so as to give effect to the provisions of this Order.

9. The Board further orders and directs that this Order shall be effective and apply to the nominations and elections for municipal purposes to be held in the said City in November and December, 1929, and at all times thereafter.

10. The Board further orders and directs that the said Corporation do affix Law Stamps to a value of \$15.00 to this Order in payment of the Board's tariff fee upon the said Application.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

Nov. 7th, 1929.

ORDER

Upon the application of the Corporation of the City of Ottawa and upon it appearing that the Order of the Board in the above matter made on behalf of the said Corporation, dated Saturday, the 15th day of June, A.D., 1929, did not define the boundaries of central Ward in the said City as such boundaries would exist after the re-subdivision of the said City into Wards established by the said Order, and the said Corporation having made application that the said order should be amended by inserting therein a clause which will define the boundaries of Central Ward as established by the said Order,

1. The Board orders and directs that the said Order dated Saturday, the 15th day of June, A.D., 1929, be amended by inserting therein the following clause:

6a. That the boundaries of Central Ward shall be as follows:

On the north by Sparks Street, on the east by the Rideau Canal, on the west by Bank Street and on the south by the Rideau Canal from the Deep Cut to the right-of-way of the Canadian National Railways where it crosses the said Canal, thence following the said right-of-way westerly to Bank Street.

2. The Board doth further order and direct that the said Corporation do affix Law Stamps to the value of Five Dollars to this Order in payment of the Board's tariff fee thereon.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2300

Application by the City of Windsor, under section 398 of "The Municipal Act", for approval of its By-law Number 3928, regulating the height and bulk of buildings to be hereafter erected abutting on Ouellette Street, in the said City.

May 29th. Application and material filed.

June 18th. Hearing, pursuant to Appointment, Council Chamber, Windsor—10 to 11 A.M.—Application granted.

PROCEDURE FILE A-2301

In the Matter of Section 4 of "The Municipal Franchises Act" (Chapter 240, R.S.O.), and

In the Matter of the granting of a Franchise by the Township of Ancaster to The Dominion Natural Gas Co., Ltd.

May 30th. Objection filed by City of Hamilton.

June 8th. Application by Township of Ancaster for approval of By-law 772, granting Franchise to Dominion Natural Gas Co. Ltd., filed.

July 9th. Hearing, pursuant to Appointment, 10.45 A.M.:11.15 A.M. to 12.30 P.M., Council Chamber, Hamilton. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.).

July 9th. Report of Mr. Commissioner Ellis filed. Adjourned to Sept. 5th, at 11 A.M., at Council Chamber, Hamilton.

Sept. 16th. Hearing, pursuant to adjournment and postponement, 10.45 to 11.30 A.M., Council Chamber, Hamilton. Adjourned 'sine die' to allow City of Hamilton to deal with Annexation Petition.

REPORT OF MR. COMMISSIONER ELLIS

The City Solicitor asked for an adjournment. He stated that he had not been furnished with copies of certain By-laws of the Township of Ancaster and the County which were referred to in the By-law under consideration, and that it was possible he would have further objections to file based upon the first mentioned By-laws. It appears that these By-laws were forwarded to his office after office hours on the 6th inst.

I stated, in view of the opposition which had developed and the importance of the questions involved, that I thought it would be best to adjourn the application to the first week in September (Sept. 5th, at 11 A.M., Standard time, at the Council Chamber, Hamilton), when the application could be heard by the full Board; the City to have 10 days to file further objections and the Township to have the right to reply if so advised.

July 9th, 1929.

(Sgd.) J. A. ELLIS,
Commissioner.

PROCEDURE FILE A-2302

Between:

The Hamilton Street Railway Co.,

Applicant,

—and—

The Corporation of the City of Hamilton
and the Corporation of the County of Wentworth,

Respondents.

(Application to abandon Street Railway Service on the Delta Line and to remove tracks and to operate omnibuses on King Street from Bartonville to the Delta).

May 31st. Application filed.

June 10th. Hearing, pursuant to Appointment, 11 A.M. to 12.50 P.M., Council Chamber, Hamilton. Judgment reserved. Board to investigate.

June 14th. Judgment delivered.

July 4th. Approved draft Order filed.

July 4th. Order issued.

JUDGMENT

The Company made an application to be permitted to abandon the street railway service on King Street, between Bartonville and the Delta, and to provide an omnibus service between these two points, thereby discontinuing the present unsatisfactory street railway service.

This application was heard in the City of Hamilton, on Monday, the 10th day of June, 1929, and after hearing the evidence the Board reserved judgment and at

the same time intimated that it would investigate as to whether it is advisable to continue railway operation between these two points by ordering double tracks to be placed on the middle of the highway, or order that the single track now located between the points above described be removed and an omnibus service installed in lieu thereof.

After carefully reviewing the material filed by the parties, and having had the Vice-Chairman and the Board's Inspector investigate the present service, the Board is of the opinion that the public would be better served by the removal of the single track to allow this space to be paved in order that an adequate omnibus service be installed between the above named points.

In case the company fails to provide a reasonably adequate service by the use of insufficient omnibus accommodation, a complaint of this character reaching the Board would receive prompt attention and an immediate investigation and remedy if at all possible.

Should the patronage warrant a change in this route the Balmoral Street route may be so arranged as to provide a through route from Bartonville to the centre of the City without passengers having to transfer as they have to do on the Bartonville and Delta line. The fares on the through route would be three tickets for twenty-five cents instead of four tickets for twenty-five cents as charged now on the Bartonville and Delta line.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

Dated at Toronto, June 14th, 1929.

June 14th, 1929.

ORDER

Upon the application of the above named Applicant at the Sittings of the Board held at Hamilton on the 10th day of June, 1929, in presence of Counsel for the Applicant and for the said The Corporation of the City of Hamilton, and in the presence of the Warden and other representatives of the said The Corporation of the County of Wentworth, and upon hearing the evidence adduced and upon hearing what was alleged by Counsel as aforesaid and by the Warden and other representatives of the said The Corporation of the County of Wentworth, the Board was pleased to direct this matter to stand over for judgment and the same coming on this day for judgment.

1. The Board doth hereby order that the Applicant be permitted to abandon the street railway service on the King Street Line in the City of Hamilton from the Delta to the west limit of the Township of Saltfleet, and to take up the tracks of the said line.

2. And the Board doth further order that the Applicant instal and operate an adequate omnibus service on King Street from the Delta to the west limit of the Township of Saltfleet.

3. And the Board doth further order that the fares to be charged on the omnibuses to be operated on the said King Street route and the rights of transfer thereto and therefrom shall be the same as are now charged and in effect on the street railway on the said King Street route.

4. And the Board doth further order and declare that either the Applicant or the said the Corporation of the City of Hamilton, or the said the Corporation

of the County of Wentworth shall have the right to apply to the Board from time to time for an Order, or Orders, amending, changing or varying this Order in any way whatever.

5. And the Board doth further order that the Applicant pay \$15.00 for Law Stamp, being the Board's tariff fee payable in respect of this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2309

Application by the City of Toronto, under section 398 (2b) of "The Municipal Act", for approval of its By-law Number 12223, repealing its Restricted Area By-law No. 8880 in so far as it prevents the erection of a duplex house on the north side of Lowther Avenue immediately east of No. 190 Lowther Avenue.

June 4th. Application and material filed.

June 24th. Hearing, pursuant to Appointment, 10.30 A.M. to 11.15 A.M., at the Board's Chambers. Applicant to file Petition of majority of owners in favor of By-law being amended as above (17 out of 33).

PROCEDURE FILE A-2311

In the Matter of the Application of the Corporation of the Township of Glenelg, under section 469 (9) of "The Municipal Act", for relief from its obligation to rebuild "McNab's Bridge" on the Base Line at the rear of Lot 51, Con. II, East of Garafraxa Road, in said Township.

June 6th. Application filed.

June 25th. Hearing, pursuant to Appointment, 11 A.M. to 12 M., Township Hall, Township of Glenelg. Judgment reserved.

July 15th. Judgment delivered.

Aug. 23rd. Draft Order filed.

Aug. 23rd. Order issued.

JUDGMENT

These were three separate applications made by the Township of Glenelg to The Ontario Railway and Municipal Board, and for the purpose of hearing all parties interested in connection therewith the full Board sat at the Township Hall in the Township of Glenelg on Tuesday the 25th day of June, 1929.

Previous to the said hearing the Board was taken to personally inspect the several bridges in question, and there was a considerable amount of evidence heard in connection with each particular bridge.

The McNab Bridge and the Keyland Bridge are both located at the foot of a very steep hill, and on roadways that do not appear to be very extensively used by the ordinary travelling public. The McLaughlan Bridge is on a highway much easier to convert into a good travelled road, but is a larger bridge than either the Keyland or the McNab Bridge, and is upon a roadway but a very short distance from the town line between the Townships of Glenelg and Artemesia.

The Township, according to the evidence, would, if required to build the said bridges, expect to receive from the Province of Ontario a grant of some forty

per cent. of the cost of construction of each particular bridge, and if this grant were made by the Province the bridges would have to be constructed of such a standard nature as to pass the inspection of the Provincial engineer.

Upon enquiry, therefore, the engineer of the Highways Department intimates that the McNab Bridge and the Keyland Bridge each being 75 feet of a span, would cost at least between \$4,000 and \$5,000, while the McLaughlan Bridge being a span of 90 feet would cost between \$6,000 and \$7,000.

It is the opinion of this Board that the Township of Glenelg should not be required to go to this large expense for the accommodation of the general public alone, especially in view of the fact that there is a splendid road just a short distance east of and parallelling the road upon which the McLaughlan Bridge was located, and that between the Keyland Bridge and the McNab Bridge there are other highways to accommodate the ordinary travelling public.

There must be considered, however, the men whose property is specially damaged by reason of the washing away of the bridges in question.

The Board has authority to relieve the Township from the construction of the several bridges mentioned upon such terms as to the Board may seem just, and in the applications under consideration the Board is of the opinion that certain conditions should be imposed upon the Township if the statutory obligation to rebuild the said bridges is removed.

The Board has taken into consideration the sworn value of the land immediately adjacent to the several bridges which land is cut in two by the Saugeen River, and communication between the several parts of which is prevented by the absence of the bridges in question.

After giving the matter consideration this Board now makes the following directions as far as the several obligations are concerned:

The Municipality of the Township of Glenelg shall pay to George Whitmore the sum of \$600.00, and to Duncan McNab the sum of \$300.00, and that upon the payment of these several sums the application of the Township of Glenelg for relief from its obligation to rebuild McNab's Bridge on the Base Line at the rear of Lot 51, Conc. II, east of the Garafraxa Road in the said Township shall be granted.

This Board doth further order that the said Township of Glenelg shall pay to John Livingstone the sum of \$800.00, and to Thomas McKeown the sum of \$50.00, and upon the payment of the said several sums that the application of the Township of Glenelg for relief from its obligation to rebuild Keyland's Bridge on the side road at Lot 40, Conc. II, north of the Durham Road in the said Township shall be granted.

This Board doth further order that the said Township of Glenelg shall pay to Angus McLaughlan the sum of \$300.00, and to John Stothart the sum of \$50.00, and that upon the payment of the said several sums the application of the Township of Glenelg for relief from its obligation to rebuild McLaughlan's Bridge on the side road at Lot 80, Conc. II, north of the Durham Road, in the said Township shall be granted.

The above sums hereby directed to be paid by the said Township of Glenelg to the several parties herein referred to are by the way of damages and by way of compensation to the said parties for the injuries or losses sustained by their said several properties, and the said compensation to be paid by the said Township and accepted by the said parties in full claim for any damage they now have or may hereafter have, or to which the said property may be subjected in any way

whatsoever by reason of the removal of the bridges in question, and the non-rebuilding of the same by the said Township of Glenelg.

This Board does not see fit to make any order as to costs, save and except that the Township of Glenelg shall pay \$15.00, the Board's fee for Law Stamps on the Order herein.

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

(Sgd.) J. A. ELLIS,
Commissioner.

Dated at Toronto the 16th day of July, A.D., 1929.

June 25th, 1929.

ORDER

1. This Application coming on for hearing this day, before this Board, at the Township Hall in the Township of Glenelg in the County of Grey, in the presence of Council for George Whitmore and Duncan McNab, no Counsel appearing for the applicant, the Township of Glenelg, upon hearing what was alleged by the Reeve of the Township and Counsel for George Whitmore and Duncan McNab, and upon hearing the evidence adduced.

2. This Board doth order that the Municipality of the Township of Glenelg shall be relieved from its obligation to re-build "McNab's Bridge" on the base line at the rear of Lot 51, Concession III, East of the Garafraxa Road in the said Township.

3. This Board doth further order that the said Township of Glenelg shall pay to George Whitmore the sum of six hundred Dollars, (\$600.00), and to Duncan McNab the sum of three Hundred Dollars (\$300.00) for damages and compensation to the said parties for injury or loss sustained by their respective properties and the said compensation shall be accepted by the said parties in full of any claim for damage they now have or may hereafter have or to which their said respective properties may be subjected in any way whatsoever by reason of the removal or non-rebuilding of the said bridge in question by the said Township of Glenelg.

4. This Board doth further order that the said Township of Glenelg shall pay Five Dollars (\$5.00), the Board's fee for law stamp on the order herein.

5. This Board doth make no further order as to costs.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2312

In the Matter of the Application of the Corporation of the Township of Glenelg, under section 469 (9) of "The Municipal Act", for relief from obligation to rebuild "Keyland's Bridge" on the side road at Lot 40, Con. II north of the Durham Road, in the said Township.

June 6th. Application filed.

June 25th. Hearing, pursuant to Appointment, 11 A.M. to 12 M., Town-

ship Hall, Township of Glenelg. Judgment reserved.
 July 15th. Judgment delivered. (See A-2311)
 Aug. 23rd. Draft Order filed.
 Aug. 23rd. Order issued.

June 25th, 1929.

ORDER

1. This Application coming on for hearing this day, before this Board, at the Township Hall in the Township of Glenelg, in the County of Grey, in the presence of Council for John Livingstone and Thomas McKeown, no Counsel appearing for the applicant, the Township of Glenelg, upon hearing what was alleged by the Reeve of the Township and Counsel for John Livingstone and Thomas McKeown, and upon hearing the evidence adduced.

2. This Board doth order that the Municipality of the Township of Glenelg shall be relieved from its obligation to rebuild "Keyland's Bridge", on the side road at Lot 41, Concession II, North of the Durham Road, in the said Township.

3. This Board doth further order that the said Township of Glenelg shall pay to John Livingstone the sum of Eight Hundred Dollars (\$800.00), and to Thomas McKeown the sum of Fifty Dollars (\$50.00), for damage and compensation to the said parties for injury or loss sustained by their said respective properties and the said compensation shall be accepted by the said parties in full of any claim for damages they now have or may hereafter have or to which their said respective properties may be subjected in any way whatsoever by reason of the removal or non-rebuilding of the said bridge in question by the said Township of Glenelg.

4. This Board doth further order that the said Township of Glenelg shall pay Five Dollars (\$5.00), the Board's fee for law stamp on the order herein.

5. This Board doth make no further order as to costs.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2313

In the Matter of the Application of the Corporation of the Township of Glenelg, under section 469 (9) of "The Municipal Act", for relief from obligation to rebuild "McLaughlan's Bridge", on the side road at Lot 50, Con. II; north of Durham Road, in the said Township.

June 6th. Application filed.

June 25th. Hearing, pursuant to Appointment, 11 A.M. to 12 M., Township Hall, Township of Glenelg. Judgment reserved.

July 15th. Judgment delivered. (See A-2311)

Aug. 23rd. Draft Order filed.

Aug. 23rd. Order issued.

June 25th, 1929.

ORDER

1. This Application coming on for hearing this day, before this Board, at the Township Hall in the Township of Glenelg, in the County of Grey, in the presence of Counsel for John Stothart and Angus McLaughlan, no Counsel

appearing for the applicant, the Township of Glenelg, upon hearing what was alleged by the Reeve of the Township and Counsel for John Stothart and Angus McLaughlan, and upon hearing the evidence adduced.

2. This Board doth order that the Municipality of the Township of Glenelg shall be relieved from its obligation to rebuild "McLaughlan's Bridge", on the side road at Lot 50, Concession II, North of the Durham Road, in the said Township.

3. This Board doth further order that the said Township of Glenelg shall pay to John Stothart the sum of Fifty Dollars (\$50.00), and to Angus McLaughlan the sum of Three Hundred Dollars (\$300.00), for damages and compensation to the said parties for injury or loss sustained by their said respective properties and the said compensation shall be accepted by the said parties in full of any claim for damages they now have or may hereafter have or to which their said respective properties may be subjected in any way whatsoever by reason of the removal or non-rebuilding of the said bridge in question by the said Township of Glenelg.

4. This Board doth further order that the said Township of Glenelg shall pay Five Dollars (\$5.00), the Board's fee for law stamp on the order herein.

5. This Board doth make no further order as to costs.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2319

In the Matter of the Petition of D. Christner and others, under section 8 of "The Local Improvement Act", against the construction by the City of Kitchener of certain local improvement—resurfacing of roadway on Park Street, from Wilmot Street to Canadian National Railway.

June 7th. Petition filed.

July 23rd. Hearing, pursuant to Appointment, 10.15 A.M. to 12 M., Council Chamber, Kitchener. Application adjourned 'sine die' to be brought up again after application has been made to Railway Company for widening of bridge.

PROCEDURE FILE A-2320

In the Matter of the Petition of U. L. Cober and others, under section 8 of "The Local Improvement Act", against the construction by the City of Kitchener of a pavement on Samuel Street—between Frederick and Brubacher Streets.

June 8th. Petition filed.

July 23rd. Hearing, pursuant to Appointment, 10.15 A.M. to 12 M., Council Chamber, Kitchener. Petition dismissed on the condition that work not to be proceeded with until next year (1930).

• PROCEDURE FILE A-2323

In the Matter of the Petition of Alex. Schafer and others, under section 20 of "The Municipal Act", for annexation to the City of Kitchener of part of the Township of Waterloo.

June 10th. Petition, copy of Resolution and other material filed.

July 23rd. Hearing, pursuant to Appointment, 10.15 A.M. to 12 M., Council Chamber, Kitchener. Application granted—annexation to take effect 1st August, 1929. Taxes and arrears of taxes to be collected by City and paid to Township when collected.

Aug. 8th. Approved draft Order filed.

Aug. 9th. Order issued.

June 23rd, 1929.

ORDER

Upon the Application of Alexander Schafer and others of the municipal electors of that part of the Township of Waterloo hereinafter more fully described and adjacent to the City of Kitchener for an Order annexing such part to the City of Kitchener.

This Board was pleased to appoint Tuesday, the 23rd day of July, 1929, at the Council Chamber, in the City Hall, in the City of Kitchener, for the hearing of those interested in supporting and opposing the granting of such Petition, and upon hearing those electors who were present in person or represented by agents or Counsel, in presence of representatives of the Corporation of the Township of Waterloo and of the City of Kitchener, no one appearing to oppose the Petition,

It is ordered that that portion of the Township of Waterloo described as follows, namely: All and Singular that certain parcel or tract of land and premises situate, lying and being in the Township of Waterloo, in the County of Waterloo and Province of Ontario, containing by admeasurement thirty-five acres, be the same more or less, and being composed of a part of Registered Plan Number two Hundred and Sixty-six in the said Township of Waterloo, and which said parcel may be more particularly described as follows, that is to say:—Commencing in the northerly limit of said Registered Plan number Two Hundred and Sixty-six at its intersection with the westerly limit of the City of Kitchener; thence westerly along said northerly limit of said Registered Plan to the westerly limit of said Registered Plan; thence southerly along last mentioned limit to the northerly limit of Lot Number Twenty of the German Company Tract; thence easterly along said northerly limit of Lot Number Twenty to said westerly limit of the City of Kitchener; thence northerly along said westerly limit of the City of Kitchener to said Point of Commencement, be, and the same is hereby annexed to and shall, from and after the first day of August, A.D., 1929, be and form a part of the Corporation of the City of Kitchener.

It is further ordered that the City of Kitchener shall collect all taxes on such property for the year 1929 and thereafter, but that the City of Kitchener shall pay to the Township of Waterloo the sum of \$327.94 on the 15th day of December, 1929, and a like sum on the 15th day of December for the next following four years, being the amount due for local improvements within the annexed area under By-law 164A of the Township of Waterloo, and the further sum of \$170.12 on the 15th day of December, 1929, and a like sum on the 15th day of December for the next following seven years, being the amount due for local improvements within the annexed area under By-law 213A of the Township of Waterloo.

It is further ordered that the City of Kitchener shall pay to the Township of Waterloo seven-twelfths of the balance of the taxes collected within the area

annexed for the year 1929, after deducting therefrom the above amounts of \$327.94 and \$170.12 respectively.

It is further ordered that all arrears of municipal taxes now outstanding unpaid against any of the land within the said annexed area which may hereafter be collected by the City of Kitchener, after deducting the cost of collection thereof shall be paid to the Township of Waterloo.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2332

In the Matter of the Petition of Mrs. May McPherson, and others, under section 8 of "The Local Improvement Act", against the construction of a sewer on Houghton Avenue—from King Street to Cumberland Avenue, and on Cumberland Avenue—from Houghton Avenue to Wexford Avenue, in the City of Hamilton.

June 14th. Petition filed.

July 9th. Hearing, pursuant to Appointment, 10.45 to 11.15 A.M., Council Chamber, Hamilton. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.). (For copy of Commissioner's Report see Reporter's Notes).

Nov. 6th. Draft Order filed.

Nov. 14th. Order issued.

July 9th, 1929.

ORDER

Upon the petition of the said Mrs. May McPherson and others to this Board under section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of proposed Sewer on Houghton Avenue from King Street to Cumberland Avenue and on Cumberland Avenue from Houghton Avenue to Wexford Avenue, and upon consideration of such Petition and the other material filed, and Mr. Commissioner Ellis, duly authorized under section 8, Chapter 225, R.S.O., having this day, pursuant to Appointment, at the Council Chamber, in the City of Hamilton, heard all parties interested, and upon consideration of the evidence adduced and what was alleged by Counsel for the Petitioners and for the Corporation of the City of Hamilton, and upon consideration of the Report of Mr. Commissioner Ellis made to the Board and adopted as the Order of the Board.

1. This Board doth order that the Petition as regards the construction of a sewer on Cumberland Avenue from Houghton Avenue to Wexford Avenue, be and the same is hereby dismissed.

2. And this Board doth further order that as regards the construction of a sewer on Houghton Avenue from King Street to Cumberland Avenue the work be not proceeded with. Provided however that at any time hereafter proceedings may be initiated for the construction of the said sewer pursuant to the provisions of section 6 of "The Local Improvement Act".

3. And this Board doth further order that there shall be no costs of this application to any party, except that the Corporation of the City of Hamilton

shall pay \$15.00 for Law Stamps on this Order, chargeable to the cost of the Work.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2333

In the Matter of the Petition of James E. Gibson and others, under section 8 of "The Local Improvement Act", against the construction of a pavement in the City of Kitchener, on Mill Street, from Queen Street to the Railway Track.
June 14th. Petition filed.

June 23rd. Hearing, pursuant to Appointment, 10.15 A.M. to 12.30 P.M., Council Chamber, Kitchener. Inspection of Street. Petition dismissed.

PROCEDURE FILE A-2335

In the Matter of the Petition of Percy Greenshields and others, under section 8 of "The Local Improvement Act", against the construction of a 24' asphalt pavement on Perth Avenue, between Royce Avenue and C.P.R. tracks.

June 14th. Petition filed.

June 27th. Hearing, pursuant to Appointment, 11 A.M., at Board's Chambers. Adjourned at request of Counsel, to 28th inst., at 10 A.M.

June 28th. Hearing, continued, 10 to 10.45 A.M., pursuant to adjournment. Adjourned to Tuesday, 17th Sept., 1929, at 10.30 A.M., at Board's Chambers.

Sept. 17th. Hearing continued, 10.30 to 10.40 A.M. Hearing concluded—Petition dismissed. City Solicitor to draft Order and submit to Mr. Manley for approval.

Sept. 27th. Approved draft Order filed.

Sept 27th. Order issued.

Sept. 17th., 1929.

ORDER

Upon the Petition of Percy Greenshields and others, pursuant to section 8 of "The Local Improvement Act" (Revised Statutes of Ontario, Chapter 235), for relief against the construction of the proposed asphalt pavement to be laid on Perth Avenue, between Royce Avenue and the Canadian Pacific Railway tracks, in the City of Toronto, upon reading the affidavit of Robert Elmer Martin, filed, proving service of the Appointment for Hearing, the evidence adduced and what was alleged by Counsel on behalf of the Petitioners and on behalf of the Corporation of the City of Toronto,

1. This Board doth order that the Application of the Petitioners for relief against the construction of an asphalt pavement to be laid on Perth Avenue, between Royce Avenue and the Canadian Pacific Railway tracks, in the City of Toronto, be and the same is hereby dismissed.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2349

Application by the Township of Malden, in the County of Essex, under section 12 of "The Planning and Development Act", for approval of the diversion of the River Front Road, in the said Township, from the southerly limit of the Town of Amherstburg to the Beaudoin Side Road.

June 26th. Application filed.

Aug. 27th. Hearing, pursuant to Appointment, at Court House, Sandwich, 9 A.M. to 6 P.M. View of Road 6 to 8 P.M.

Aug. 28th. Hearing continued—9.30 A.M. to 3.30 P.M. Judgment reserved—Written argument to be put in (no reply allowed.)

Sept. 5th. Argument by J. H. Rodd, K.C., Solicitor for Petitioners, filed.

Sept. 14th. Argument by O. E. Fleming, K.C., C. P. McTague and H. T. Hough, filed.

Sept. 16th. Argument by A. W. McNally filed.

Nov. 7th. Judgment delivered. Application refused.

JUDGMENT

In the Township of Malden, in the County of Essex, there is a highway running southerly from the southerly limits of the Town of Amherstburg along the banks of the Detroit River to what is known as the Beaudoin Side Road, such road or highway being more generally known as the Front or River Road.

This Roadway has existed and has been a main travelled highway for probably one hundred years or more, and by reason of the action of the waters of the Detroit River, which the Applicants say is washing away the bank so as to render the Front or River Road dangerous in its present condition, and very difficult to repair, this application is made under Section 12 of Chapter 236, R.S.O. 1927, for permission to close up the said Front or River Road from the limits of Amherstburg aforesaid to the Beaudoin Highway, and in substitution therefor, or as argued by Counsel for the Applicants by way of diversion thereof, to construct a new road some distance easterly from the river bank, such new road or diversion to be a straight continuation of the travelled highway now being used south of the Beaudoin Side Road, and continuing with slight variations until it reaches the southerly limits of the Town of Amherstburg.

At the northerly limit of the proposed new road or highway alternative routes are proposed to enter the Town of Amherstburg, one suggesting that the new highway should turn immediately west to reach the present Front or River Road and enter Amherstburg as it does at present; another alternative suggesting that the new highway be continued by the Town of Amherstburg to connect direct with Dalhousie Street, and another alternative suggesting that the said new highway shall be turned easterly at or near its northerly extremity to connect with Apsley Street produced in the said Town of Amherstburg.

The Act referred to, Chap. 236 R.S.O. 1927 at Sec. 5 (ss2), reads as follows:

"No plan of survey and subdivision of land within an urban zone or joint urban zone shall be registered unless it has been approved by the Council of each municipality within which any part of such land is situate, and by the Council of any city, town or village which such urban zone or joint urban zone adjoins or by the Board".

and at Section 12:

"No highway shall be established, laid out, widened, altered, diverted, "stopped up or closed in any urban zone or joint urban zone, except with the "approval of the Council of each municipality in which the said highway or "any part of it is situated, and of the Council of any city, town or village, "which such urban zone or joint urban zone adjoins, or of the Board".

The urban zone through which the proposed new highway or diversion of the Front or River Road, whichever may be considered as the proper designation, is that urban zone to which the municipality of the Town of Amherstburg is immediately adjacent, and if the Council of the Township of Malden is merely diverting the highway as suggested by Counsel for the Applicants, all that would be necessary would be to have the approval of the Township itself, and the approval of the municipality of the Town of Amherstburg.

It is quite true that the section gives the Board permission to approve of the registration of the plan even though the municipality of the Town of Amherstburg had not been consulted at all, but the practice of the Board has been to have the plan submitted to the municipality adjoining the urban zone in an endeavor to secure the approval of this municipality before the Board is asked to interfere.

The Township of Malden passed a by-law numbered 791, which by-law appears to be the foundation upon which the plan submitted to this Board is based, although the said by-law was not passed by the Council of the Township of Malden until the latter part of August, 1929.

The application for the Board's approval came on for Hearing at the Court House in the Town of Sandwich on Tuesday the 27th August, 1929, before C. R. McKeown, K.C., Chairman, and A.B. Ingram, Vice-Chairman, and after a two-day session judgment was reserved with permission to all parties to send in written arguments in connection with the matters in question.

While a municipality is generally conceded to control very largely the highways within its own boundaries the Legislature has seen fit to recognize that adjoining municipalities may have some vested rights in the highways of another municipality, and has so expressed that vested right by requiring the consent of the adjacent municipality to any serious alteration in an established highway, and if that consent is refused the initiating municipality may apply to The Ontario Railway and Municipal Board for its approval to the change, and the Board if it considers that its approval should be given, and that the adjoining municipality has acted in an arbitrary or improper manner in refusing to consent, may give the Board's approval to such change, and in this manner the approval of the adjoining municipality is dispensed with.

It appears that the plan in question was submitted to the municipality of the Town of Amherstburg, the said municipality refused to approve of the proposed change, and the matter therefore came by way of application before this Board. The by-law, not having been passed by the Township of Malden until some four or five days before the Hearing of this application by the Board was not, as a completed by-law, presented to the Council of the Town of Amherstburg at the time of the Hearing, and a suggestion was made by the Board to adjourn the Hearing to allow the Council of the Town of Amherstburg to consider the by-law itself, but the Solicitor for the Town of Amherstburg waived any such presentation of the by-law, asserting that he had full instructions to oppose the application and was ready to proceed.

Under these circumstances, and in view of the strenuous opposition being offered by many ratepayers of the Township of Malden, as well as the strong opposition by the municipality of the Town of Amherstburg, this Board is of the opinion that before granting its approval to the said plan all matters connected with the preparation of the said plan and properly before this Board should be taken into consideration.

On the evening of Monday, the 26th of August, 1929, the Chairman and the Vice-Chairman of the said Board personally viewed the **Front or River Road**, and were driven from Amherstburg to the southern terminus of what now constitutes the Front or River Road, that is the Beaudoin Side Road, and had pointed out to them the location of the proposed diversion or new highway.

The by-law above referred to, and upon which the suggested plan was prepared, was according to the evidence submitted passed as a result of a petition filed with the Council of the Township of Malden, and signed by a number of the ratepayers now owning property through or along the front of which the Front or River Road now runs, and the Petition above referred to upon which said by-law was based, sets out that it is the desire of the Petitioners that the Front or River Road shall be closed or stopped, and that the land now being used for the purposes of this roadway shall be transferred to the several owners of property along the said Front or River Road, each property owner taking that portion immediately opposite his own land, and that in return therefor the property owner receiving said land shall give or convey to the Township of Malden a strip of land 66 feet wide in the rear of the said property, or at any rate some distance easterly from the Front or River Road to enable the said Township to construct the proposed diversion or new highway, and that the building of the new road shall in all other respects be constructed as under "The Local Improvement Act".

There are so many questions arising in connection with the plan submitted for the Board's approval that the situation becomes somewhat complicated. If the new roadway is but a division of the Front or River Road, and it is argued that might well come under the term "diversion" as mentioned in that statute, then the Council does not require the consent of the County Council to such by-law, but if on the contrary this new highway is to be looked upon as coming under Section 483, subsection (1) (c) of "The Municipal Act", being Chapter 233, R.S.O. 1927, which gives to the Council of every municipality power to pass by-laws for stopping up any highway or part of a highway, and for leasing or selling the freehold of a stopped-up highway or part of a highway, then by subsection (6) of the same Section 483, the consent of the Council of the county in which the township is situated is required before the by-law can come into effect.

The Petition further says that it is the desire of the Petitioners that the roadway shall be constructed under "The Local Improvement Act". By Chapter 235 R.S.O. 1927, Section 2, Subsection (1) (a) (b), permission is given to do certain works under "The Local Improvement Act", such as opening, widening, extending, grading, altering the grade of, diverting and improving a street, opening and establishing a new street.

Is the new roadway in question a street? Stroud's Judicial Dictionary defines the term "street" as a public or private roadway running in front of houses or buildings, etc. Can it be said that this new highway is running in front of any buildings simply because certain buildings which now front on the River

Road may have a rear entrance upon the highway in question after it has been constructed?

Elliott in his work on roads and streets, third edition, at page 21, defines a street as a road or public way in a city, town or village. All streets, he says, are highways, although not all highways are streets.

Has it been established, therefore, that "The Local Improvement Act", being Chapter 233, R.S.O. 1927, empowers the Council of a rural municipality to open up and establish a new highway where one does not now exist, and fronting upon which there are and can be no houses under "The Local Improvement Act".

These are questions which the Board will not hesitate to decide if such decision is necessary, but having viewed the Front or River Road, and from the evidence the water of the Detroit River is said to have been higher during the year 1929 than for many previous years and to be now receding, this Board is of the opinion that proper safeguards could and should be placed along the said Front or River Road where at the present time it appears to be dangerous, at comparatively little expense to the said Township, and in view of the fact that a large number of the ratepayers of the said Township of Malden are opposed to the closing of the said Front or River Road as appears by the evidence adduced and the largely signed petitions filed with the Board, in view of the fact that the adjoining Town of Amherstburg is practically a unit opposing the closing of the Front or River Road, and considering that such closing would not be in the public interest, this Board does not feel that it is such an application as should receive its approval, and without prejudice to the Township of Malden to make a further application at a later date should the erosion made by the waters of the Detroit River cause further damage, for the present approval of this Board to the filing of the plan in question must be refused.

The Board does not see fit to make any Order as to costs, save and except that the Township of Malden shall pay \$30.00, the Board's fee for Law Stamps herein.

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

Dated at Toronto, this 7th day of November, A.D., 1929.

PROCEDURE FILE A-2350

Application by the City of Toronto, under section 398 (2b) of "The Municipal Act", for approval of its By-law Number 12257, repealing its By-law No. 8815 in so far as it prevents the conversion of No. 130 Roxborough Street West into a duplex dwelling.

June 26th. Application and material filed.

July 24th. Hearing, pursuant to Appointment, 10.30 to 11 A.M. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.). Recommendation that By-law be approved.

July 27th. Draft Order filed.

July 29th. Order issued.

July 24th, 1929.

ORDER

The application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", being R.S.O., 1927, Chapter 233, of its above mentioned By-law having come on to be heard before Mr. Commissioner Ellis, duly authorized to hear the said application and to report to the Board thereon as provided by section 8 of "The Railway and Municipal Board Act", being R.S.O., 1927, Chapter 225, by appointment on the 24th day of July, 1929, in the presence of the owners of premises 128 and 130 Roxborough Street West, no other property owner appearing although duly notified as by affidavits filed appears, and the said Commissioner, upon considering said By-law and upon hearing what was alleged by or on behalf of all persons before him, having reported to the Board under date of the 24th day of July, 1929, in favour of the granting of such approval, and the said report having been adopted as the basis of the Board's Order,

The Board orders that the said By-law, being intituled "No. 12257. A By-law to repeal By-law No. 8815 in so far as it prevents the conversion of No. 130 Roxborough Street West into a duplex dwelling", he and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2351

Application by the City of Toronto, under section 398 of "The Municipal Act", for approval of its By-law Number 12259, restricting to use for detached or duplex residences only the land and buildings on both sides of Laxton Avenue.

June 26th. Application and material filed.

July 24th. Hearing, pursuant to Appointment, 10.30 to 11 A.M., at Board's Chambers (Mr. Commr. Ellis authorized under section 8, Chapter 225, R.S.O.). Recommendation that By-law be approved.

July 27th. Draft Order filed.

July 29th. Order issued.

July 24th, 1929.

ORDER

The Application of the Corporation of the City of Toronto, for approval, pursuant to section 398 of "The Municipal Act", (R.S.O., 1927, Chapter 233), of its above mentioned By-law having come on to be heard before Mr. Commissioner Ellis duly authorized to hear the said application and to report to the Board thereon as provided by section 8 of "The Railway and Municipal Board Act", being R.S.O., 1927, Chapter 225, by appointment on the 24th day of July, 1929, in the presence of Counsel representing various property owners favourable to the said By-law, and in the presence of one property owner so disposed, no property owners appearing in opposition thereto although duly notified as by affidavits filed appears, and the said Commissioner, upon considering said By-law and upon hearing what was alleged by or on behalf of all persons before him,

having reported to the Board under date of the 24th day of July, 1929, in favour of the granting of such approval, and the said Report having been adopted as the basis of the Board's Order,

The Board orders that the said By-law, being intituled "No. 12259. A By-law to restrict to use for detached or duplex residences only land and buildings on both sides of Laxton Avenue", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2357

In the matter of the Petition of A. Boehmer and others, under section 8 of "The Local Improvement Act", against the proposed distribution of cost of a proposed pavement on Crichton Street, from Charles Street to Beechwood Avenue, in the City of Ottawa.

July 3rd. Petition filed.

July 10th. Petition of J. T. McElroy and others, totally opposing the above work filed.

July 13th. Certificate of City Clerk, that Petition of J. T. McElroy and others totally opposing the work is insufficient, filed.

July 13th. Further Petition (supplementary to Petition of J. T. McElroy) filed. (Not filed in time.)

July 18th. Hearing, pursuant to Appointment, 10 A.M., Council Chamber, Ottawa. Board directs City to pay 60% and property owners 40% of total cost of work. City Solicitor to draft Order.

July 22nd. Draft Ordr filed.

July 22nd. Order issued.

July 18th, 1929.

ORDER

The petition of August Boehmer and others, under section 8 of "The Local Improvement Act", against the proposed distribution of cost of a Local Improvement Asphalt Pavement on Crichton Street, between Charles Street and Beechwood Avenue in the City of Ottawa having come on to be heard before the Board at a special sittings thereof held at the City of Ottawa on Thursday, the 18th day of July, A.D., 1929, at the hour of ten o'clock in the forenoon (daylight saving time) in the presence of Alderman Brethour on behalf of the said Petitioners and of Counsel on behalf of the Corporation of the City of Ottawa and of the City Engineer thereof, and in the presence of certain interested property owners opposing the construction of the said Local Improvement pavement and Counsel on their behalf, upon reading the said petition and Local Improvement Report Number 418—C of the said Corporation, and upon hearing what was alleged by all parties,

The Board doth order and direct that Local Improvement Report Number 418—C of the Corporation of the City of Ottawa providing for the construction of an asphalt pavement on Crichton Street from Charles Street to Beechwood Avenue in the City of Ottawa, under the provisions of Section 8 of "The Local Improvement Act" be amended so as to provide that sixty (60) per cent of the total cost of the said work (which sixty (60) per cent shall be calculated by including therein such proportion of the cost of the construction of the said pavement as would in any event under the provisions of the said Act be borne by the

said Corporation). shall be borne and paid by the said Corporation at large, and the remaining forty (40) per cent of the cost of the said work shall be specially assessed upon the land abutting upon the said street in accordance with the provisions of the said Act, and that in all other respects the said Local Improvement Report be confirmed.

2. And the Board doth further order and direct that the said Corporation do affix Law Stamps to a value of Fifteen Dollars (\$15.00) to this Order as the Board's tariff fee on this application.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2361

Application by the City of Stratford, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law Number 3290, amending its Restricted Area By-law Number 2740 by exempting therefrom Lot .No. 63 in Canada Company's Survey to permit the erection of a Gasoline and Oil Service Station thereon.

July 4th. Application filed.

July 25th. Hearing, pursuant to Appointment, 10.45 to 11 A.M., Council Chamber, Stratford. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.) Recommendation that Application be granted.

July 27th. Draft Order filed.

July 29th. Order issued.

July 25th, 1929.

ORDER

Upon the application of the said Corporation, and upon reading a copy of each of the said By-laws, the Petition and Consent of a majority of the owners of property adjoining the said described lands and the other material filed, and Mr. Commissioner Ellis, duly authorized under section 8, Chapter 225, R.S.O., having, pursuant to Appointment, at the Council Chamber, in the City of Stratford, this day heard what was alleged by the Solicitor for the said Corporation, and it appearing that no objection was filed or taken against the approval of the said By-law Number 3290,

The Board orders, under and in pursuance of the provisions of subsection (2b) of section 398 of "The Municipal Act", that the said By-law Number 3290, intituled "By-law Number 3290 of the City of Stratford being a By-law to amend "By-law Number 2740 of the City of Stratford", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2378

Between:

The Corporation of the Township of Scarborough,

Appellant,

—and—

The Executors of the Estate of George Bell, deceased,

Respondent.

(Assessment Appeal).

(Land— \$59,390.00).

July 17th. Notice of Appeal filed.

Nov. 28th. Hearing, pursuant to Appointment, 10.30 A.M., to 2.30 P.M., at Board's Chambers. Hearing concluded—Appeal dismissed.

PROCEDURE FILE A-2380

Application by the City of Ottawa, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law Number 6686, repealing its Restricted Area By-law No. 5518 as to Lot No. 11 on the south side of Besserer Street.

July 18th. Application and material filed.

Sept. 13th. Hearing, pursuant to Appointment, 10 A.M.: 10.15 to 10.40 A.M., Council Chamber, Ottawa. Application dismissed (See Reporter's Notes).

PROCEDURE FILE A-2383

Application by the Township of York, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 10232—restricting to detached or semi-detached private dwellings, duplex houses or apartment house, the land on Dennis Avenue and other highways.

July 23rd. Application and copy of By-law filed.

Sept. 19th. Hearing, pursuant to Appointment, 10.30 A.M. to 12 M., at Board's Chambers. By-law to be amended not to apply to any Lot on Weston Road. By-law to apply only to west side of Brownville Avenue; Eglinton Avenue to be considered by Council. By-law stands for amendment by Council after negotiation with parties, etc. Hearing adjourned to Oct. 16th, 1929, at 10.30 A.M., at Board's Chambers. (See Reporter's Notes).

Oct. 16th. Hearing continued, 10.30 to 10.45 A.M. Amending By-law 10383 filed. By-law approved as amended (Eglinton Avenue to be included in Restricted Area and amendment to be made accordingly (par. 1) if necessary. (See Reporter's Notes).

Oct 22nd. Amending By-law 10383 filed.

Oct. 24th. Draft Order filed.

Oct. 24th. Order issued.

16th, Oct. 1929.

ORDER

Upon the application of the said Corporation of the Township of York for approval of its By-law Number 10232 as amended by By-law No. 10383, Upon reading the declaration of James McGuire proving service of the notice of the application by registered mail on all the owners affected by the said by-law whose names appear on the last revised assessment roll of the municipality as required by the provisions of Section 398 of "The Municipal Act", Upon the evidence adduced and what was alleged by Counsel for the Applicant and by various property owners present or represented by Counsel,

1. The Board orders, under and in pursuance of Section 398 of "The Municipal Act", that the said By-law Number 10232 as amended by By-law Number 10383 passed by the Council of the Corporation of the Township of York be and it is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2395

Application by the Town of Port Colborne, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law Number 43 (1929) amending its Restricted Area By-law No. 28 (1924) by adding thereto certain district bounded by King, Killaly and Merritt Streets and Welland Ship Canal.

Aug. 7th. Application and material filed.

Sept. 10th. Hearing, pursuant to Appointment, 2.30 to 4.15 P.M., at Board's Chambers. By-law to be amended to include only area—Keefer St. to Killaly St. (Park and Sewage Disposal Plant not to be included). (See Reporter's Notes). Hearing adjourned to Oct. 8th, 1929, at 2.30 P.M. (Dominion Government to be notified).

PROCEDURE FILE A-2396

Application under section 102 of "The Telephone Act", for an Order approving of the sale by The Wheatley Telephone Co., Ltd., of its entire undertaking to The Bell Telephone Company of Canada, Ltd.

Aug. 7th. Application and material filed.

Aug. 26th. Hearing, pursuant to Appointment, 2.15 to 3 P.M., Court House, Chatham. Application granted.

Aug. 29th. Order.

Aug. 29th, 1929.

ORDER

Upon the application of the above named Applicant, upon hearing the evidence adduced on behalf of all parties, upon reading the said Application and other material on file.

The Board orders, pursuant to Section 102 of "The Telephone Act" (R.S.O., 1927, c. 227), that the sale by the Applicant of its plant, equipment, business and assets, located in the Village of Wheatley and Township of Remney, in the County of Kent, to The Bell Telephone Company of Canada, be and the same is hereby approved.

And the Board makes no order for costs, save and except that the Applicant shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2400

Application by the City of Ottawa, under section 398 of "The Municipal Act", for approval of its By-law No. 6705, restricting to detached, semi-detached and duplex dwellings the land on the south side of Stanley Avenue—between Union Street and the Right-of-Way of The Canadian Pacific Railway Company.

Aug. 9th. Application and copy of By-law filed.

Sept. 13th. Hearing, pursuant to Appointment, 10 to 10.15 A.M., Council Chamber, Ottawa. (Vice-Chairman authorized under section 8, Chapter 225, R.S.O.). Recommendation that application be granted.

Sept. 13th. Application granted.

Sept. 21st. Draft Order filed.

Sept. 23rd. Order issued.

Sept. 13th, 1929.

ORDER

The Application of the Corporation of the City of Ottawa, under section 398 of "The Municipal Act", for approval of its By-law Number 6705, prohibiting the erection or use of buildings on land abutting on the South side of Stanley Avenue, between Union Street and the right-of-way of the Canadian Pacific Railway Company, except for such purposes as set out in the said By-law; having come on to be heard before Mr. A. B. Ingram, Vice-Chairman of this Board, (duly authorized under section 8, Chapter 225, R.S.O.) at a special sittings thereof held at the City of Ottawa, pursuant to Appointment on Friday, the 13th day of September, A.D., 1929, at the hour of ten o'clock in the forenoon, daylight-saving time, in the presence of Counsel for the Applicant Corporation, and it appearing that a copy of the said Appointment and of the said By-law Number 6705 had been served upon all the owners affected by the said By-law whose names appear on the last revised assessment roll of the municipality, in accordance with the provisions of clause (c) of subsection 2, of section 398 of "The Municipal Act", and no one appearing in opposition to the said By-law, and the Vice-Chairman having reported to the Board in favor of the granting of the application, and such Report having been adopted as the basis of this Order,

The Board doth hereby approve of said By-law Number 6705 of the Applicant Corporation.

And the Board doth direct that the said Corporation do cause to be affixed Law Stamps of the value of Fifteen Dollars to this Order in payment of the Board's tariff fee upon the said Application.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2417

In the matter of the Petition of Daniel Crosthwaite and others, under section 8 of "The Local Improvement Act", against the widening of King Street between Ottawa Street and Kenilworth Avenue, in the City of Hamilton.

Aug. 21st. Petition filed.

Sept. 16th. Hearing, pursuant to Appointment, 10.45 A.M.; 11.30 A.M. to 12 M. Council Chamber, Hamilton. All parties agree work to be proceeded

with— question of payment to be deferred to later date. Adjourned pending adjustment, to Oct. 9th, at 10.45 A.M., Council Chamber, Hamilton.

Oct. 9th. Hearing continued, 10.45 A.M. to 12 M. Question of regularity of Petition considered. Board is of the opinion that the matter might well be taken up again by Council and, without making any Order, suggested cost might be borne 70% by Corporation; 10% by property owners who had heretofore given their land to widen the street, and 20% by those property owners whose land is being paid for by the Corporation. Matter stands adjourned 'sine die' to allow Council to consider this suggestion.

Dec. 5th. Matter spoken to— Mr. Burkholder's request to be included among the property owners paying 10% of widening was not allowed.

PROCEDURE FILE A-2429

Application by the City of Kitchener, under subsection (2b) of section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 2103, amending its Zoning By-laws 1823 (as amended by 1834 and 1835) by adding a further industrial district thereto.

Aug. 28th. Application and material filed.

Oct. 15th. Hearing, pursuant to Appointment, 10 A.M. to 10.45 A.M., Council Chamber, Kitchener. Application granted.

Oct. 24th. Draft Order filed.

Oct. 24th. Order issued.

Oct. 15th, 1929.

ORDER

Upon the application of the said Corporation, and upon reading the copy of each of the said By-laws and the other material filed, and the Board having this day, pursuant to Appointment, at the Council Chamber, in the City of Kitchener, heard all parties interested, no one appearing in opposition to the Application although public notice of the Hearing was duly given as directed by the Board,

The Board orders, under and in pursuance of the provisions of Section 398 of "The Municipal Act", that the said By-law 2103, being a By-law to amend the Zoning Ordinance, be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2432

In the matter of the Petition of Alvin J. Huth and others, under section 8 of "The Local Improvement Act", against the construction of water mains on Hulbach Street, from Glidner Street to Wood Street, in the City of Kitchener.

Sept. 15th. Petition filed.

Oct. 15th. Hearing, pursuant to Appointment, 10 A.M. to 10.45 A.M., Council Chamber, Kitchener. The Petitioners opposing the work asked for two weeks to make arrangements for alternative scheme and if they fail the By-law may be proceeded under. Accordingly the application was refused. Order in connection therewith— if one required— to issue Nov. 1st, 1929.

PROCEDURE FILE A-2449

Application by John H. C. Crowell, under section 21 of "The Municipal Act", for detachment of certain of his lands (part Lot No. 11, Con. IX) from the Town of Bothwell, and the annexation of same to the Township of Zone.

Sept. 13th. Application filed.

Oct. 22nd. Hearing, pursuant to Appointment, 12.30 to 3.40 P.M., Town Hall, Bothwell. Application dismissed.

PROCEDURE FILE A-2453

In the matter of Petition of C. E. Burkholder, and others, under section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of proposed cement walk and curb on the east side of Park Row Street, from King Street to Cumberland Avenue, in the said City.

Sept. 17th. Petition filed.

Oct. 9th. Hearing, pursuant to Appointment, 10.45 A.M. to 12 M., Council Chamber, Hamilton. Petition dismissed.

Nov. 6th. Draft Order filed.

Nov. 12th. Order.

ORDER

Upon the Petition of C. E. Burkholder and C. E. Burkholder, Executor of the estate of the late William Burkholder, deceased, to this Board under section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of a cement walk and independent curb proposed to be constructed on Park Row Avenue (or Street), from King Street to Cumberland Avenue in the said City, and upon hearing read the Petition herein, the Appointment for Hearing and the evidence adduced and what was alleged by the Petitioners and their Counsel, and by Counsel for the Corporation of the City of Hamilton, and on consideration of the material filed.

This Board doth order that the Petition be and the same is hereby dismissed.

And this Board doth further order that there shall be no costs of this application to any Party except that the Corporation of the City of Hamilton shall pay \$15.00 for Law Stamps on this Order, chargeable to the cost of the Work.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2454

Application by the City of Kitchener, under section 490 (2) of "The Municipal Act", for approval of its By-law No. 2108—laying out and establishing a lane, to be known as "Hall's Lane", between Benton and Eby Streets, in the said City, at less than the statutory width of 66 feet (20 feet).

Sept. 18th. Application and material filed.

Oct. 15th. Hearing, pursuant to Appointment, 10 A.M., Council Chamber, City Hall, Kitchener. Application withdrawn.

PROCEDURE FILE A-2460

Between:—

John J. Cable and John A. Scoffin,

Applicants.

—and—

The Peoples' Telephone Co. of Forest, Ltd.,

Respondent.

(Application under section 94 and 95 of "The Telephone Act", for an Order prescribing the terms and conditions upon which the Respondent shall furnish Applicants with service, and providing for joint use of existing pole leads of The Parkhill-Arkona Telephones, Ltd.

Sept. 28th. Application filed.

Oct. 21st. Hearing, pursuant to Appointment, 2.15 to 4 P.M., Court House, Sarnia. (Vice-Chairman authorized under sec. 8, Chap. 225, R.S.O.).

Nov. 28th. Report of Vice-Chairman filed and adopted.

Nov. 28th. Order.

REPORT

The undersigned, having heard the evidence of all parties relative to this Application, recommends that the annexed Order be adopted as the Order of the Board.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

Nov. 28th, 1929.

ORDER

Upon the Application of the above named Applicants, upon reading the said Application, the Report of A. B. Ingram, Esquire, Vice-Chairman, who pursuant to appointment heard the evidence adduced on behalf of all parties, which Report has been adopted as the basis of this Order, and other material filed.

The Board orders:

1. That upon the Applicants, John G. Cable and John A. Scoffin, agreeing to pay the Respondent, The People's Telephone Company of Forest, Limited, its established charges for Rural Party Line Telephone Service the said Respondent shall furnish the said Applicants with such service.

2. That, for the purpose of furnishing the service herein ordered, The Parkhill-Arkona Telephones, Limited, shall lease one metallic circuit now erected upon its poles upon the Eighteenth Side Road of the Township of Warwick between the Fourth Concession and the premises of John A. Scoffin to the Respondent, The People's Telephone Company of Forest, Limited, at a rental of \$2.50 per annum for each one-quarter of a mile or fraction thereof.

3. That the installation of the service herein ordered shall be completed on or before the Fifteenth day of December, 1929.

And the Board makes no order for costs, save and except that the Respondent shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2461

Between:—

Florence Macpherson and Vaughan Macpherson,

Applicants.

—and—

The Parkhill-Arkona Telephones, Ltd.,

Respondent.

(Application under section 94 and 95 of "The Telephone Act", for an Order prescribing the terms and conditions upon which the Respondent shall furnish Applicants with service, and providing for joint use of existing pole leads of The Peoples' Telephone Co. of Forest, Ltd.)

Sept. 28th. Application filed.

Oct. 21st. Hearing, pursuant to Appointment, 2.15 to 4 P.M., Court House, Sarnia. (Vice-Chairman authorized under sec. 8, Chap. 225, R.S.O.).

Nov. 28th. Report of Vice-Chairman filed and adopted.

Nov. 28th. Order.

REPORT

The undersigned, having heard the evidence of all parties relative to this Application, recommends that the annexed Order be adopted as the Order of the Board.

(Sgd.) A. B. INGRAM,

Vice-Chairman.

Nov. 28th, 1929.

ORDER

Upon the Application of the above named Applicants, upon reading the said Application, the Report of A. B. Ingram, Esquire, Vice-Chairman, who pursuant to appointment heard the evidence adduced on behalf of all parties, which Report has been adopted as the basis of this Order, and other material filed.

The Board orders:

1. That upon the Applicants, Florence Macpherson (acting on behalf of her father, William Macpherson), and Vaughan Macpherson, agreeing to pay the Respondent, the Parkhill-Arkona Telephones, Limited, its established charges for Rural Party Line Telephone Service the said Respondent shall furnish the said Applicants with such service.

2. That, for the purpose of furnishing the service herein ordered, The People's Telephone Company of Forest, Limited, shall lease space for two side blocks upon the poles now erected on the Sixth Concession of the Township of Warwick, beginning at the pole most nearly adjacent to the premises of Vaughan Macpherson and ending at the pole most nearly adjacent to the premises of William Macpherson, to The Parkhill-Arkona Telephones, Limited at an annual rental of Ten Cents (.10c.) per pole.

3. That the installation of the service herein ordered shall be completed on or before the Fifteenth day of December, 1929.

And the Board makes no order for costs, save and except that the Respondent shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2465

Application by the City of Toronto, under section 4 of "The Planning and Development Act", for approval of sections 17, 18 and 19 of the City's General Plan.

Sept. 27th. Application and plan filed.

Oct. 23rd. Hearing, pursuant to Appointment, 11 to 11.20 A.M., at Board's Chambers. (Mr. Commissioner Ellis authorized under section 8, Chapter 186, R.S.O.). Recommendation that application be granted.

Dec. 19th. Plans of sections 17, 18 and 19 approved and certified.

PROCEDURE FILE A-2474

Application by M. J. O'Brien, operating The Calabogie & Renfrew Telephone System, under section 103 of "The Telephone Act", for authority to increase charges for service.

Oct. 4th. Application filed.

Nov. 8th. Hearing, pursuant to Appointment—11 A.M. to 12.30 P.M., at Calabogie. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.)

Nov. 20th. Report of Mr. Commissioner Ellis filed and adopted.

Nov. 21st. Order.

REPORT

In the Matter of the Application of M. J. O'Brien, operating The Calabogie and Renfrew Telephone System, for the approval of the following charges for telephone service:

Local Service—Village of Calabogie

Individual Line, Business\$25.00 per annum.

Individual Line, Residence\$20.00 per annum.

Extra Mileage: For each one-quarter mile or fraction

thereof beyond the village limits \$5.00

Rural Party Line Service\$18.00 per annum.

The foregoing rates are based on a continuance of ownership of equipment by the subscriber. Where the Applicant furnishes all equipment approval is asked for the following charges:

Individual Line, Business\$30.00 per annum.

Individual Line, Residence\$25.00 per annum.

Rural Party Line Service\$22.00 per annum.

These rates to be subject to an additional charge of \$2.50 per annum where a desk telephone is furnished in lieu of a wall telephone.

The foregoing charges to be payable half-yearly in advance and to be subject to a discount at the rate of \$1.00 per annum if paid on or before January 15th and July 15th in each year.

This application was heard at Calabogie on November 8th, 1929, by the undersigned, the Board's Supervisor of Telephone Systems being also present.

The Application was represented by E. A. Wright, while C. A. Mulvihill appeared as counsel for the subscribers.

From the evidence adduced it would appear that this system was originally organized by a number of farmers and was operated under the name of "The Calabogie and Renfrew Telephone System" until 1917, when it was purchased by the Applicant for the sum of Four Thousand Three Hundred and Eighty Dollars (\$4,380.00). This purchase, however did not include the telephones and wires upon the subscribers' premises which still remain the property of the subscribers.

Since the acquisition of the system by the Applicant it has until recently been operated in conjunction with his light and power plant, and, with the exception of switchboard operation, the maintenance and management has been performed by the employees of the said plant, the cost of labour, etc. being charged to each system in proportion to the work done.

The present charges for service are as follows:

Calabogie Village:

Individual Line Service:

Business, Wall Telephone	\$13.00 per annum.
Residence, Wall Telephone	\$ 8.00 per annum.
Rural Party Line Service	\$ 5.00 per annum.

In regard to the service in the Village of Calabogie, it would appear that each subscriber is required to purchase the telephone and pay the cost of erecting the line from the Central Office to his premises, which means that the installation of these services has, with the exception of the Central Office equipment, involved little or no capital expenditure on the part of the Applicant. As already indicated the telephones on rural party lines and other equipment on the subscribers premises are also furnished by the subscriber.

While statements filed by the Applicant show a total of 62 telephones in operation, in a subsequent letter the Applicant states that owing to the removal of certain subscribers from Calabogie and other services being discontinued there are now only 57 telephones earning revenue.

Profit and Loss statements filed for the years ending June 30th, 1924, to June 30th, 1929, inclusive, show the following:

1924, Loss	\$147.58
1925, Loss	19.64
1926, Loss	172.60
1927, Loss	65.80
1928, Loss	389.21
1929, Profit	37.12
Total Loss	\$794.83
Profit	37.12
making a net loss of	\$757.71

During the same period "Revenue" has been charged with \$1,980.30 for depreciation. As, however, the Statement of Assets and Liabilities for the year ending June 30th, 1929, does not show the existence of any depreciation reserve and there is, further, no evidence of any portion of the money set aside for that purpose being expended upon reconstruction or replacement of plant, the result of the six years' operation referred to leaves a cash balance to the credit of revenue of \$1,222.59 instead of a deficit of \$757.71.

The Applicant's Statement of Assets and Liabilities already referred to would appear to be faulty, inasmuch as the cost of the plant has been reduced by writing off depreciation from \$4,741.11 to \$789.81 without any reference being made to the net balance, after providing for losses, of \$1,222.59 taken out of revenue for depreciation. In this connection it may be stated that the practice in all well managed telephone plants is, not to write off depreciation automatically each year but to create a depreciation reserve and out of such reserve maintain the plant value at its original cost plus additions thereto. Depreciation should only be written off when any plant unit is taken out of service and replaced by new plant and in such event the original cost of the plant taken out of service is deducted from plant account and the cost of the new unit is added thereto.

The Applicant states that owing to the Light and Power plant having been acquired by the Hydro-Electric Power Commission of Ontario it has been necessary to make other arrangements for the carrying on of the telephone service. A contract has been entered into providing for switchboard operation and maintenance at \$1,200.00 a year, the total estimated cost of operation, maintenance, management, etc., less depreciation and bad debts, being \$1615.00. The estimated revenue from tolls is \$850.00 but the average toll revenue for the six years ending June 30th, 1929, is approximately \$900.00 per annum.

A more correct estimate of the actual financial requirements of the system under present conditions would be, as follows:

Operation and Maintenance	\$1200.00
Repair Material	100.00
Taxes (actual 1929)	60.74
Miscellaneous	40.00
	\$1400.74
Less Tolls	900.00
	\$ 500.74

\$500.74 to be furnished by subscribers annual charges.

Two alternative courses are suggested for the future operation of this system, as follows:

1. That the Applicant purchase from the subscribers the telephones and all other equipment furnished by them, including the circuits in the Village of Calabogie which were erected by the subscribers at their own cost. The Applicant would then own all the plant and equipment required for the furnishing of service and would be responsible for the proper and efficient maintenance thereof. In such an event the Board would be prepared to approve such annual charges for service as might be necessary to meet the cost of operation, maintenance and management, provide for depreciation and return a reasonable interest on the investment.

2. That the subscribers avail themselves of the machinery provided by Part II of "The Telephone Act" by acquiring the system, the purchase price being furnished by the issue of debentures of the municipality repayable in ten annual instalments of principal and interest. In such an event this Board would approve of an annual charge sufficient to meet the instalments of principal and interest during the first ten years and meet the cost of maintenance.

There is no doubt whatever that the subscribers, and especially those connected with the Rural Party lines, have been receiving telephone service at an exceptional low rate. A rate, moreover, which has been insufficient to return the applicant a reasonable interest on his investment if the telephone system is to be considered as being entirely apart from the Light and Power plant. On the other hand, the rates for which approval is now applied for are under existing conditions altogether too high to be considered.

It is therefore recommended that, pending such action as the Applicant or subscriber may take in the matter of reorganization, the following charges be approved for the year 1930:

Village of Calabogie:

Individual Line Service:

Business, Wall Telephone	\$15.00 per annum.
Residence, Wall Telephone	\$10.00 per annum.
Rural Party Line Service, Wall Telephone	\$10.00 per annum.

(Sgd.) J. A. ELLIS,

Commissioner.

Toronto, November 20th, 1929.

Adopted as the Order of the Board.

(Sgd.) C. R. McKEOWN, K.C.,

Chairman.

(Sgd.) A. B. INGRAM,

Vice-Chairman.

Nov. 21st., 1929.

ORDER

Upon the Application of the above-named Applicant, upon reading the Report of J. A. Ellis, Esquire, Commissioner, who pursuant to appointment heard the evidence adduced on behalf of all parties, which Report has been adopted as the basis of this Order, Statements of Assets and Liabilities, Receipts and Disbursements and other material filed.

The Board orders that the Applicant, M. J. O'Brien, operating The Calabogie and Renfrew Telephone System, be authorized to charge the following rates for telephone service for the year 1930 to take effect as from January 1st, 1930:

Village of Calabogie:

Individual Line Service:

Business, Wall Telephone	\$15.00 per annum.
Residence, Wall Telephone	\$10.00 per annum.
Extension Wall Telephone on same	

Premises as the first telephone:

Business	\$12.00 per annum.
Residence	\$ 8.00 per annum.
Desk Telephone in lieu of Wall Telephone	\$2.50 per annum additional.
Extension Bell	\$2.50
Changing location of telephone	\$3.00

Rural Party Line Service, Wall Telephone

And the Board makes no order for costs, save and except that the Applicant shall pay \$10.00 for the Law Stamps required for this Order.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2480

Application by The Essex Border Utilities Commission, under section 10 of "The Consolidated Essex Border Utilities Act, 1929", for approval of its By-law No. 67 (\$67,300 for extension of present water main in Townships Sandwich West and South, on Randolph Ave. to Talbot Road, and on Talbot Road to Provincial Highway).

Oct. 9th. Application and material filed.

Oct. 23rd. Hearing, pursuant to Appointment, 10 to 10.30 A.M., Court House, Sandwich. Application granted.

Oct. 24th. Draft Order filed.

Oct. 25th. Order issued.

Oct. 23rd, 1929.

ORDER

Upon the Application of The Essex Border Utilities Commission made to this Board at the Town of Sandwich on the 23rd day of October, 1929, under section 10 of "The Consolidated Essex Border Utilities Act, 1929", upon hearing the proceedings herein and the evidence adduced and upon hearing what was alleged on behalf of the Applicant:

The Board, under and in pursuance of section 10 of "The Consolidated Essex Border Utilities Act, 1929", and amendments thereto consents to the issuing by the Essex Border Utilities Commission of the debentures in the sum of Sixty-seven thousand three hundred Dollars (\$67,300.00) under provisional By-law Number 67, of the said Commission for the purpose of constructing an extension of the water main on Randolph Avenue to the Talbot Road and thence along the Talbot Road to the Provincial Highway.

And the Board makes no Order as to costs except that the Commission shall pay \$10.00 for Law Stamps on this Order.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2481

Application by the Town of Sandwich, under section 12 of "The Planning and Development Act", for approval of the widening of Sandwich Street, from Rosedale Avenue to Detroit Street.

Oct. 10th. Application and material filed.

Oct. 23rd. Hearing, pursuant to Appointment, 10 A.M.: 10.30 to 10.45 A.M., Court House, Sandwich. Application granted.

Oct. 24th. Draft Order filed.

Oct. 25th. Order issued.

Oct. 23rd, 1929.

ORDER

Upon the application of the Municipal Corporation of the Town of Sandwich made to this Board at the Town of Sandwich on the 23rd day of October, 1929, under section Twelve of "The Planning and Development Act", R.S.O., Chapter 236, upon hearing the proceedings herein and the evidence adduced, and upon hearing what was alleged on behalf of the Applicant:

The Board, under and in pursuance of section 12 of "The Panning and Development Act, R.S.O., Cap. 236, and amendments thereto, approves of the widening of Sandwich Street in the Town of Sandwich between Detroit Street and Rosedale Avenue according to the plan annexed hereto.

And the Board makes no Order as to costs except that the Town of Sandwich shall pay \$10.00 for Law Stamps on this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2483

Application by the Town of Sandwich, under section 26 (3) of "The Local Improvement Act", for approval of its By-law No. 1900, providing for assumption by the Corporation of part of the owners' portion of the cost of paving Sandwich Street from Detroit Street to Rosedale Avenue.

Oct. 11th. Application and material filed.

Oct. 23rd. Hearing, pursuant to Appointment, 10.45 to 11.40 A.M., Court House, Sandwich. Application granted.

Oct. 24th. Draft Order filed.

Oct. 25th. Order issued.

Oct. 23rd, 1929.

ORDER

Upon the application of the Municipal Corporation of the Town of Sandwich made to this Board at the Town of Sandwich on the 23rd day of October, 1929, under section 26 subsection (3) of "The Local Improvement Act", upon hearing the proceedings herein and the evidence adduced, and upon hearing what was alleged on behalf of the Applicant and of the property owners on both sides of the Street,

The Board, under and in pursuance of subsection (3) of section 26 of "The Local Improvement Act", and the amendments thereto, approves of By-law Numbered 1900 of the Town of Sandwich assuming the sum of \$12,389.72 of the Owners' portion of the cost of the paving of Sandwich Street in the said Town of Sandwich, between Detroit Street and Rosedale Avenue.

And the Board makes no Order as to costs except that the Town of Sandwich pay \$10.00 for Law Stamps on this Order.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2484

In the matter of the Petition of Fred J. Moore, and others, under section 8 of "The Local Improvement Act", against the construction in the Town of Perth of a pavement on Sinclair Street, from North Street to Clyde Street.

Oct. 14th. Petition filed.

Oct. 31st. Hearing, pursuant to Appointment, 1 P.M.: 2 to 2.30 P.M., Council Chamber, Perth. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.).

Nov. 2nd. Report of Mr. Commissioner Ellis filed.

Nov. 4th. Report of Mr. Commissioner Ellis adopted. Petition dismissed.

REPORT OF MR. COMMISSIONER ELLIS

I heard this Petition in the Town of Perth on the 31st October, 1929, being authorized under section 8, Chapter 225, R.S.O.

The estimated cost of the work is \$3,330.00, of which the Corporation pays \$1,995.00.

It appears that the Town of Perth, sometime ago, and largely on Petition, instituted a system of pavements and that the greater proportion of all the streets in the Town have now had such pavements laid. The proposed pavement in this case is a connecting link in this system.

The street in its present condition is in a very bad state and difficult for traffic, having considerable holes in it. It also requires grading, and in any event would entail considerable expenditure to put it in anything like reasonable condition.

Under all the circumstances I recommend that the Petition be dismissed, and that the Town pay \$10.00 for Law Stamp on the Order, chargeable to the cost of the work.

Respectfully submitted,

(Sgd.) J. A. ELLIS,

Commissioner.

Dated at Toronto this 2nd day of November, A.D., 1929.

Adopted:

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

PROCEDURE FILE A-2486

Application by the City of Toronto, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law Number 12347 being a By-law to repeal By-law No. 8867 in so far as it prevents the conversion of the house at the north-west corner of Avenue Road and Bernard Avenue into a store and apartments.

Oct. 15th. Application and material filed.

Dec. 4th. Copy of By-law 12405 amending By-law 12347 filed.

Dec. 30th. Hearing, pursuant to Appointment, 10.30 to 11.30 A.M., at Board's Chambers. By-law to be approved. Residential character of Bernard Avenue not to be unduly prejudiced by proposed building.

PROCEDURE FILE A-2498

Application by the Village of Forest Hill, under section 398 (2b) of "The Municipal Act", for approval of its By-law No. 405, amending its By-law No. 285 to allow the erection of Apartment houses on Lonsdale Road, west of Spadina Road.

- Oct. 18th. Application and material filed.
 Nov. 13th. Hearing, pursuant to Appointment, 10.30 to 11 A.M., at Board's Chambers. Application granted. Applicant's Solicitor to draft Order.
 Nov. 16th. Draft Order filed.
 Nov. 18th. Order issued.

Nov. 13th, 1929.

ORDER

Upon the application of the said Corporation, upon reading the material filed by Melville Grant, Esquire, Solicitor for the Applicant, and upon hearing what was alleged by Counsel for the Applicant, Sydney Hancock, Esq., appearing personally and no one else appearing to oppose the said application, although public notice of the hearing of the same was duly given, as provided by Statute and directed by the Board

The Board orders, under and in pursuance of Section 398 of "The Municipal Act", being Chapter 233, of the Revised Statutes of Ontario, (1927), that the said By-law Number 405, intituled "By-law Number 405. A. By-law to allow of the erection of Apartment Houses on Lonsdale Road West of Spadina Road and to amend By-law Number 285," be and the same is hereby approved.

And the Board doth make no Order as to costs except for the payment by the Applicant Corporation of the fee of Ten Dollars (\$10.00) for Law Stamps payable on the Order herein.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2499

Application by the Village of Sturgeon Point, under section 398 of "The Municipal Act", for approval of its Restricted Area By-law No. 118, prohibiting the use of land or erection or use of buildings in the area of the said Village west of and including Lot 5, Plan 65, except for the purpose of a private detached dwelling.

Oct. 18th. Application and material filed.

Nov. 19th. Hearing, pursuant to Appointment, 10.30 to 11.30 A.M., at Board's Chambers. Adjourned to 10 A.M., 26th, inst.

Nov. 26th. Hearing continued pursuant to adjournment, 10 to 10.30 A.M. Application granted. By-law to be amended to allow private garages, boat-houses, etc., used in connection with private residences.

PROCEDURE FILE A-2508

In the matter of the Petition of W. J. Saul and others, under section 8 of "The Local Improvement Act", against the construction as a local improvement of an asphaltic pavement on Lewis Street, from Peter Street to the River, in the Town of Perth.

Oct. 23rd. Petition filed.

Oct 31st. Hearing, pursuant to Appointment, 1 to 2 P.M., Council Chamber, Perth. (Mr. Commissioner Ellis authorized under section 8, Chapter 225, R.S.O.).

Nov. 2nd. Report of Mr. Commissioner Ellis filed.

Nov. 4th. Report of Mr. Commissioner Ellis adopted. Petition dismissed.

REPORT OF MR. COMMISSIONER ELLIS

I heard this Petition in the Town of Perth on the 31st October 1929, being authorized under section 8, Chapter 225, R.S.O.

The estimated cost of the work is \$3,615.00, of which the Corporation pays \$1,825.

It appears that the Town of Perth sometime ago, and largely on Petition, instituted a system of pavements, and that the greater proportion of all the streets in the Town have now had such pavements laid. The proposed pavement in this case is a connecting link in this system.

The street in its present condition is in a very bad state and difficult for traffic, having considerable holes in it. It also requires grading, and in any event would entail considerable expenditure to put it in anything like reasonable condition.

Under all the circumstances I recommend that the Petition be dismissed, and that the Town pay \$10.00 for Law Stamp on the Order, chargeable to the cost of the work.

Respectfully submitted,

(Sgd.) J. A. ELLIS,

Commissioner.

Date at Toronto this 2nd day of November, A.D., 1929.

Adopted:

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

PROCEDURE FILE A-2510

In the matter of the Petition of A. G. Blaney, et al, under section 20 of "The Municipal Act", for annexation to the City of Hamilton of part of the Townships of Barton and Ancaster, being parts of Lots 21 in the 3rd and 4th Concessions of the Township of Barton, and Lots 56 and 57 in the 1st and 2nd Concessions of the Township of Ancaster, and part of the Gore of Ancaster, in the County of Wentworth (West Hamilton), and

In the matter of the Application of the City of Hamilton for an amendment of the description of the area or district to be annexed.

Oct. 24th. Petition, Resolution of City Council, etc., filed.

Oct. 25th. Petition of Fred. H. Stroud, et al, opposing the annexation filed.

Nov. 20th. Hearing, pursuant to Appointment, 10.45 A.M. to 12.30 P.M., Council Chamber, Hamilton. Adjourned to Dec. 5th, 1929, at 10.45 A.M.,

Dec. 5th. Hearing continued, 10.45 A.M., Council Chamber, Hamilton. Original Petition withdrawn; New Petition filed and the Board will issue an Appointment for Hearing upon receipt of Resolution of Expediency.

PROCEDURE FILE A-2514

Application by the Village of Forest Hill, under section 398, subsection (2b), of "The Municipal Act", for approval of its By-law No. 421, amending its By-law Number 285 to permit the erection of duplex and apartment houses on Thelma Avenue and duplex houses on south side of Coulson Avenue.

Oct. 26th. Application and material filed.

Nov. 13th. Hearing, pursuant to Appointment, 10.30 A.M.: 11 A.M. to 11.10 A.M., at Board's Chambers. Application granted. Applicant's Solicitor to draft Order.

Nov. 16th. Draft Order filed.

Nov. 18th. Order issued.

Nov. 13th, 1929.

ORDER

Upon the application of the said Corporation, upon reading the material filed by Melville Grant, Esq., Solicitor for the Applicant, and upon hearing what was alleged by Counsel for the Applicant, and no one appearing to oppose the said application, although public notice of the hearing of the same was duly given as provided by Statute, and directed by the Board,

The Board orders, under and in pursuance of Section 398 of "The Municipal Act", being Chapter 233, of the Revised Statutes of Ontario, (1927), that the said By-law Number 421, intituled "By-law Number 421. A By-law to amend By-law Number 285 so as to permit the erection of duplex and apartment houses on Thelma Avenue, and of duplex houses on the south side of Coulson Avenue", be and the same is hereby approved.

And the Board doth make no Order as to costs except for the payment by the Applicant Corporation of the fee of Ten Dollars (\$10.00) for Law Stamps payable on the Order herein.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2519

In the matter of the Petition of Chas. F. Winges and others, under section 8 of "The Local Improvement Act", against the construction by the City of Ottawa of an asphalt pavement on Main Street, from Hawthorne Avenue to Clegg Street, in the said City.

Oct. 30th. Petition filed.

Nov. 15th. Hearing, pursuant to Appointment, 9.30 to 10 A.M., Council Chamber, Ottawa. Property owners to pay 50% of entire cost of work and Corporation 50% including therein what would otherwise be the Corporation's share.

Nov. 30th. Draft Order filed.

Dec. 2nd. Order issued.

Nov. 15th, 1929.

ORDER

The petition of Charles F. Wings and others, under section 8 of "The Local Improvement Act", against the construction by the City of Ottawa of an asphalt pavement on Main Street from Hawthorne Avenue to Clegg Street in the said City, having come on to be heard before the Board pursuant to Appointment dated the 4th day of November instant, at a special sittings thereof held at the City of Ottawa on Friday the Fifteenth day of November, A.D., 1929, at the hour of half-past nine o'clock in the forenoon, in the presence of Alderman York on behalf of the said Petitioners and of the City Engineer on behalf of the Corporation of the said City, upon reading the said petition, the said Appointment for Hearing, the evidence of service and publication thereof, the Local Improvement Report Number 440—C of the said Corporation and upon hearing what was alleged by all parties,

1. The Board doth Order and direct that Local Improvement Report Number 440—C of the said Corporation, providing for the construction of an asphalt pavement on Main Street from Hawthorne Avenue to Clegg Street in the said City, be amended so as to provide that fifty (50) per centum of the total cost of the said work (which fifty (50) per centum shall be calculated by including therein such proportion of the cost of the construction of the said pavement as would in any event, under the provisions of The Local Improvement Act, be borne by the said Corporation shall be borne and paid by the said Corporation at large, and the remaining fifty (50) per centum of the cost of the said work shall be specially assessed upon the land abutting upon the said part of the said street, in accordance with the provisions of the said Act, and that all necessary amendments be made in the said report as shall be necessary to give effect to the terms of this Order, and that in all other respects the said Local Improvement Report be confirmed.

2. And the Board doth further order and direct that the said Corporation do affix Law Stamps to a value of Fifteen dollars (\$15.00) to this Order as the Board's tariff fee on this Application.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2521

In the matter of the Petition of James Murty, (Executor of the John Curran Estate) and others, under section 20 of "The Municipal Act", for annexation to the City of Peterborough of part of the Township of Monaghan (North).

Oct. 30th. Petition, Resolution of City Council and other material filed.

Nov. 7th. Objection filed by Township of North Monaghan.

Nov. 21st. Hearing, pursuant to Appointment, 12 M. to 1 P.M., Council Chamber, Peterborough. Petition granted.

Nov. 29th. Approved draft Order filed.

Nov. 29th. Order issued.

Nov. 21st, 1929.

ORDER

Upon the application of the above named Applicants, and upon reading the Petition of the said Applicants, the Resolution of the Council of the Corporation of the City of Peterborough passed on the 3rd day of September, 1929, declaring

the expediency of such annexation, and Notice of the said Resolution and Petition having been duly given by the said Council to the Council of the Township of Monaghan (North) and to the Council of the County of Peterborough respectively, and Notice of the hearing of this Application having been duly served, advertised and posted, and upon hearing what was alleged by the Reeve and Clerk for the said Township of Monaghan (North), Counsel on behalf of the Corporation of the City of Peterborough, and Counsel on behalf of the applicants:—

1. The Board orders and declares that the lands and premises in the Township of Monaghan (North) and County of Peterborough included in said Petition and being described as follows:— All and Singular that certain parcel or tract of land and premises situate lying and being in the Township of North Monaghan, in the County of Peterborough and Province of Ontario, being composed of all Park Lot Number Twenty Township Lot Number Thirteen, in the Eleventh Concession of the Township of North Monaghan, lying East of the line of the Grand Trunk Railway, which line is shown on plan attached to registered instrument No. 384 North Monaghan, be and the same are hereby annexed to the Corporation of the City of Peterborough, SUBJECT to the following terms and conditions, namely:—

1. That the annexation shall come into force on the first day of December, 1929.

2. That the said lands shall be added to and form part of the South Ward.

3. That the Corporation of the City of Peterborough do pay to the Corporation of the Township of Monaghan (North) the sum of Fifty dollars (\$50.00) in full of the share of the debenture debt of the said Township for the payment of which the said lands above described are liable and that upon payment of the said sum of Fifty dollars (\$50.00) the said lands shall be free from all liability in respect of any debt, charge or right of the said Corporation of the Township of Monaghan (North).

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2525

Application by the City of Hamilton, under section 120 of "The Railway Act", for approval of plan showing extension of Edgemount Avenue from its southerly terminus southerly across the tracks of The Hamilton, Grimsby and Beamsville Railway Company, in the City of Hamilton, and directing the said Company to construct and maintain such crossing.

Nov. 2nd. Application and plan (E-26) filed.

Nov. 20th. Hearing at Hamilton, in Council Chamber, 10.45 A.M. Application granted. Applicants Solicitor to draft Order.

Nov 25th. Draft Order filed.

Nov. 29th. Order.

Nov. 20th, 1929.

ORDER

Upon the application of the Corporation of the City of Hamilton, and upon reading the Notice of Application filed by F. R. Waddell, Esq., K.C., Solicitor for the Applicant, and the Consent, dated the 4th day of November, 1929 of the said

Railway Company, and having this day, pursuant to appointment, at the Council Chamber, in the City of Hamilton heard what was alleged by Counsel for the City Corporation and the Vice-President of the said Railway Company, and upon consideration of the blue print plan of the said extension, and other material filed,

The Board orders, under and in pursuance of the provisions of Section 120 of "The Railway Act", R.S.O. 1927, Chapter 224, that the said extension of Edgemont Street, in the City of Hamilton, from its southerly terminus southerly across the tracks of "The Hamilton, Grimsby and Beamsville Electric Railway Company", be and the same is hereby approved, subject however to the provisions of Clause 2 of the above recited Consent of the said Railway Company, that the said Company are put to no expense in the matter of construction or maintenance of the said crossing.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2536

In the matter of the Application of the Township of Etobicoke, under "The Township of Etobicoke Act, 1923" (Chapter 62, 13-14 Geo. V.) and amendments, for approval of its By-law No. 3450— establishing Water Area No. 13.

Nov. 6th. Application and material filed.

Nov. 27th. Hearing, pursuant to Appointment, 10.30 A.M.; 10.45 to 11.15 A.M., Board's Chambers. Application granted. Applicant's Solicitor to draft Order.

Dec. 2nd. Draft Order filed.

Dec. 2nd. Order issued.

Nov. 27th, 1929.

ORDER

Upon the application of the said Corporation, upon reading the Notice of Application and other material filed, and Public Notice of the Hearing of such application having been duly given as directed by the Board, and upon hearing Counsel for the Applicant and for those in opposition to the application;

The Board orders and certifies, under and pursuant to the provisions of said Act, being Chapter 62, 13-14 Geo. V., and amendments thereto, that the said By-law No. 3450, intituled "By-law No. 3450. A By-law of the Municipality of "the Township of Etobicoke to set aside and designate a defined section or area in "the Township of Etobicoke wherein to construct and extend a system of water-"mains and waterworks for the benefit of such defined area", be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2537

In the matter of the Application of the Corporation of the Township of Etobicoke, under "The Township of Etobicoke Act, 1923", (13-14 Geo. V. Chapter 62) and amendments thereto, for approval of its by-law No. 3451, establishing Water Area No. 14.

Nov. 6th. Application and material filed.

Nov. 27th. Hearing, pursuant to Appointment, 10.30 to 10.45 A.M., at Board's Chambers. Application granted. Area to be amended (North-west corner to be eliminated) as set forth by Applicant's Solicitors. (See Reporter's Notes). By-law to be amended accordingly. Applicant's Solicitor to draft Order.

Dec. 13th. New By-law No. 3471 filed.

Dec. 13th. Draft Order filed.

Dec. 13th. Order.

Dec. 13th, 1929.

ORDER

Upon the application of the said Corporation, upon reading the notice of application and other material filed, and public notice of the hearing of the said application having been duly given as directed by the Board, and upon hearing Counsel for the applicant, and upon hearing those in favour and in opposition of the application and it appearing upon the application that the Area described in the proposed by-law should be reduced and the Board having so directed and it now appearing that the said By-law No. 3471 describes an Area which to this Board appears satisfactory.

The Board orders and certifies under and in pursuance of the provisions of the said Act being Chapter 62, 13-14 George V., and amendments thereto, that the said By-law No. 3471, intituled "By-law No. 3471. A By-law of the Municipality of the Township of Etobicoke to set aside and designate a defined section or Area in the Township of Etobicoke wherein to construct and extend a system of watermains and waterworks for the benefit of such defined Area" be and the same is hereby approved.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2538

In the matter of the Petition of Emma N. Webber, under section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of a sidewalk on the north side of Webber Avenue from Victoria Avenue easterly 225 feet to the end of the present walk.

Nov. 9th. Petition filed.

Nov. 20th. Hearing, pursuant to Appointment, 10.45 A.M. to 12 M., Council Chamber, Hamilton. Adjourned to Dec. 5th, 1929, at 10.45 A.M.

Dec. 5th. Hearing continued, 10.45 A.M. Petition dismissed.

Dec. 13th. Draft Order filed.

Dec. 13th. Order issued.

Dec. 5th, 1929.

ORDER

Upon the petition of Mrs. Emma Webber to this Board under section 8 of "The Local Improvement Act", against the construction by the City of Hamilton of proposed cement walk on Webber Avenue, north side, from Victoria Avenue easterly 225 feet to the end of the present sidewalk, upon hearing read the Petition

herein, the Appointment for Hearing and the evidence adduced and what was alleged on behalf of the Petitioner, and by Counsel for the Corporation of the City of Hamilton, and on consideration of the material filed,

This Board doth order that the Petition be and the same is hereby dismissed.

And this Board doth further order that there shall be no costs of this application to any Party except that the Corporation of the City of Hamilton shall pay \$20.00 for Law Stamps on this Order, chargeable to the cost of the work.

(Seal)

(Sgd.) C. R. McKEOWN,
Chairman.

PROCEDURE FILE A-2539

Application by the Town of Cobourg, under subsection (2b) of section 398 of "The Municipal Act", for approval of its By-law No. 1421, amending its By-law No. 1375 by eliminating therefrom the lot owned by Miss Margaret Olley at the corner of King and Ontario Streets.

Nov. 9th. Application and material filed.

Dec. 23rd. Hearing, pursuant to Appointment, 11.15 A.M. to 1 P.M. Council Chamber, Cobourg. Application granted unless a Petition against the By-law within two weeks, signed by a majority of the ratepayers notified of application by Town Clerk, is filed with the Board.

PROCEDURE FILE A-2540

In the matter of the Application of W. A. Broughton and others, under section 21 of "The Municipal Act", for detachment of certain farm lands from the Town of Whitby and the annexation of same to the Township of Whitby, all as shown on Schedules "A" and "B" to Notice of Application.

Nov. 9th. Application filed.

Dec. 9th. Hearing, pursuant to Appointment, 10 A.M. to 5 P.M., Council Chamber, Whitby. Judgment reserved.

PROCEDURE FILE A-2552

Between:

Barton Bonds & Investments, Ltd.,

Appellant,

—and—

The Corporation of the City of Hamilton,

Respondent.

(Assessment Appeal— Income).

Nov. 19th. Notice of Appeal filed.

Dec. 5th. Hearing, 10.45 A.M.: 10.55 A.M. to 12 M., Council Chamber, Hamilton. Judgment reserved.

Dec. 31st. Judgment delivered— Appeal allowed.

OPINION OF THE BOARD

The Barton Bonds & Investments, Limited, is a Corporation which came into existence under Letters Patent issued from the Office of the Provincial Secretary of the Province of Ontario on the 22nd day of February, 1928, and the objects and powers of the said Company are in such Letters Patent fully set out.

The objects for which the said Company was organized are to carry on a business as a general financial agent, broker and promoter and generally to carry on and undertake any business, undertaking, transaction or operation commonly carried on or undertaken by promoters and contractors for public and other works. The many and varied works or undertakings that may be entered into by the Company, the Barton Bonds & Investments, Limited, are very fully set out in the Letters Patent above referred to.

The capital of the Company is divided into 20,000 preferred shares of a par value of \$100 each, and 30,000 common shares of no nominal or par value.

According to the said Letters Patent it is set out "the Head Office of the Company to be situate in the Township of Barton in the said County of Wentworth, with Post Office address at Mountain Top, Hamilton, in the said County of Wentworth". A Notarial copy of the said Letters Patent has been filed with the Board in support of the contention made by Counsel for the said Company that the said Barton Bonds & Investments, Limited, is not liable to be taxed for income in the Municipality of the City of Hamilton.

The Assessor for the said City of Hamilton assessed the Appellant, Barton Bonds & Investments, Limited, for an income of \$63,610.00, and the Appellant appealed against this assessment to the Court of Revision, when the assessment was by the Court of Revision of the City of Hamilton confirmed. The Appellant then appealed from the decision to the Judge of the County Court of the County of Wentworth and His Honour, the Judge of the County Court, saw fit to confirm the assessment as fixed by the said Court of Revision. An Appeal was then taken by the Appellant to this Board and the matter came up for Hearing on Thursday, the 5th December, and subsequently on Friday, the 20th December, 1929, at Hamilton.

This Board was not placed in possession of any evidence that may have been given either before the Court of Revision or the Judge of the County Court, nor were any reasons filed as to why the Court of Revision fixed the assessment at the figure above mentioned, nor as to why the said County Judge saw fit to confirm the said assessment, and this Board is therefore obliged to come to a decision from the evidence submitted and arguments by Counsel on the dates above mentioned. Counsel for the City of Hamilton filed with the Board a statement which is signed by one Finley, but does not appear to have been sworn to before anyone, as there is no official signature attached either by an Assessor, Justice of the Peace, Commissioner or otherwise. Furthermore, the statement is one sent out apparently by the Assessment Commissioner of the City of Hamilton, calling upon the Southam Publishing Company, Limited, of Montreal, to furnish to the said Assessor the names of all shareholders in the said Southam Publishing Company, Limited, who are resident in Hamilton. The statement as filed sets out the names of several shareholders resident in the City of Hamilton and under that heading we find, among other names, the name of the Appellant, Barton Bonds & Investments, Limited. Under the heading "Amount of stock held" in the said statement it is set out that the Barton Bonds & Investments holds 1962 shares preferred

stock and 51,620 shares of common stock and that the dividends and bonuses declared in favor of the Barton Bonds & Investments, Limited, for 1928, amount to \$63,618, and that the Company's address is "c/o Spectator, Hamilton". This is all the evidence filed by the City of Hamilton to establish the right of the said City to assess the Barton Bonds & Investments, Limited, on income, and in that statement there is nothing whatever indicating where the Head Office of the Barton Bonds & Investments, Limited, is located. The witness called by the City of Hamilton, when asked if the Company had a Head Office in the Township of Barton stated "Not that I am aware of".

"The Assesment Act", by section 11, subsection (2), reads in part as follows:— Subject to subsection (6) of section 40 the income x x x x x of an incorporated Company, if assessable, shall be assessed x x x x x against the Company at its Head Office, or if the Company has no Head Office, at its chief place of business in the Municipality". In the Letters Patent incorporating the said Company (a copy of which Letters Patent is filed with this Board as evidence) it has been distinctly stated that "the Head Office of the Company to be situated in the Township of Barton in the said County of Wentworth, with Post Office address at Mountain Top, Hamilton, in the said County of Wentworth".

By section 92, subsection (1) of "The Companies Act" a Company may by By-law change the location of the Head Office in Ontario. Reference was made by Counsel for the Appellant to re Smith Transportation Company, Limited, 34, O.W.N., page 25, wherein His Lordship, Mr. Justice Fisher, speaks of the Head Office of the Company as the Head Office designated in the Letters Patent, or in any By-laws that may be passed by the Company pursuant to section 92 of "The Companies Act". We have not before the Board any evidence as to whether in fact there is in the Township of Barton any office where the business or any part of the business of the Appellant Company is carried on, nor have we any evidence that there is no such office. The Letters Patent fix definitely the Head Office as in the Township of Barton and there does not appear to have been any By-law passed by the Company in any way changing the location of that Head Office. The fact that the Southam Publishing Company, perhaps under instructions, sent certain dividend cheques to the Company, c/o the Spectator Office, Hamilton, does not in any way establish that the Head Office of the Company is thereby in Hamilton. From the evidence before us we therefore come to the conclusion that the Head Office of the Company, as set out in the Letters Patent must, under the circumstances, be binding upon the Municipality of Hamilton, the Appeal must be allowed and the assessment against Barton Bonds & Investments, Limited, made by the Corporation of the City of Hamilton, struck out, and its assessment roll amended accordingly.

There will be no costs, save and except the Board's fee for Law Stamps on the Order to be issued herein to be paid by the City of Hamilton.

Dated at Toronto this 31st day of December, A.D., 1929.

(Seal)

(Sgd.) C. R. McKEOWN,

Chairman.

PROCEDURE FILE A-2563 P.587

Application by the City of Toronto, under section 4 of "The Planning and Development Act", for approval of sections 31, 32, 38, 39, 54, 56, 57, 59, 60 and 69 of its General Plan.

Nov. 28th. Application and plans filed.

Dec. 19th. Hearing, pursuant to Appointment, 10.30 to 11 A.M., at Board's Chambers. Application granted as to all except section 54, approval of which not to issue until 15th January, 1930, so that Mr. Grant may get further instructions from Council of Village of Forest Hill. (See Reporter's Notes).

PROCEDURE FILE A-2578

In the matter of the Petition of Ada Thompson and others, under section 8 of "The Local Improvement Act", against the opening and establishing of East 31st Street from present northerly terminus in Mount Hamilton Gardens Survey to Crockett Street, and from present northerly terminus in T. Livingstone Survey to Concession Street, in the City of Hamilton.

Dec. 12th. Petition filed.

Dec. 20th. Hearing, pursuant to Appointment, 10.45 A.M.: 11.30 A.M. to 11.55 A.M., Council Chamber, Hamilton. Board suggested that costs should be divided equally between City and property owners. This met with approval of property owners and City offered no objection.

PROCEDURE FILE A-2579

In the matter of the Petitions of A. G. Blaney and others, under section 20 of "The Municipal Act", for annexation to the City of Hamilton of part of the Township of Ancaster, in the County of Wentworth.

Dec. 13th. Petitions filed.

Dec 20th. Hearing, pursuant to Appointment, 10.45 to 11.35 A.M., Council Chamber, Hamilton. Application granted— Order to take effect January 1st, 1930.

ANALYTICAL CLASSIFIED INDEX OF APPLICATIONS TO THE BOARD

LIST OF APPLICATIONS RESPECTING PROVINCIAL RAILWAYS DURING 1929

	Procedure File	Plan
"Bathurst Street Bridge"—Approval plan &c. of. See "Forest Hill, Village of."		
Canadian National Railways—Approval plan &c. of proposed shelter at Dunrankin.....	A-2176	
Department of Public Highways of Ontario—Approval plan &c. of Mimico Creek bridge, Township of Etobicoke, County of York.....	A-2497	
Forest Hill, Village of—Approval plan &c. of "Bathurst Street Bridge" over Cedarvale Ravine.....	A-2197	572
Guelph Radial Railway. See "Hydro-Electric Power Commission of Ontario."		
Guaranty Trust Co. of Canada—Mortgage Deed of Trust to, by Windsor, Essex & Lake Shore Electric Railway Association.....	A-2413	
Hamilton, Grimsby & Beamsville Electric Railway Co.—Approval Standard Passenger Tariff.....	A-2056	
Hamilton, City of—Approval construction of Mountain Highway under and across the Incline Railway of Hamilton Mountain Park Co., Ltd., at head of Wentworth Street.....	A-2096	361
Hamilton Mountain Park Co., Ltd. do	do	do
Hamilton Street Railway Co. vs. City of Hamilton—Approval operation of one-man car on any and all routes.....	A-2118	
Hamilton, City of; Hamilton Street Railway Co. v. do	do	
Hamilton, City of, vs. Hamilton Street Railway Co.—Double track on King Street from Ottawa Street to Kenilworth Avenue.....	A-2246	
Hamilton Street Railway Co.; City of Hamilton vs. do	do	
Hamilton & Wentworth Suburban Area Commission—Approval plan &c. of bridge just east of Village of Stoney Creek, over which will run tracks of Hamilton, Grimsby & Beamsville Railway Co.....	A-2247	577
Hamilton, Grimsby & Beamsville Railway Co. do	do	do
Hamilton Street Railway Co. vs. City of Hamilton and County of Wentworth—To abandon service on Delta Line and to operate bus service on King Street from Bartonville to the Delta.....	A-2302	
Hamilton, City of; Hamilton Street Railway Co. vs. do	do	
Highways, Public, Department of—Approval plan of design, &c. of proposed Mimico Creek bridge, Township of Etobicoke, County of York.....	A-2497	
Hamilton, City of—Approval plan—extension of Edgemount Avenue across tracks of Hamilton, Grimsby & Beamsville Railway Co., etc.....	A-2525	
Hamilton, Grimsby & Beamsville Railway Co. do	do	
Hydro-Electric Power Commission of Ontario—Approval plans &c. of crossings in Town of Riverside:		
Isabelle Place.....	A-2255	
Belleperche Place.....	A-2256	
Hydro-Electric Power Commission—Approval spur track from Guelph Radial Railway to Guelph Stove Co. plant.....	A-2366	
International Railway Co.—Approval plan &c. of retaining wall at Ellis Street, Niagara Falls, Ont.....	A-2411	
Ontario, Department of Public Highways—Approval plan &c. of Mimico Creek bridge, Township of Etobicoke, County of York.....	A-2497	
Public Highways of Ontario, Department of. do	do	
Riverside, Town of—Approval crossing of Hydro-Electric Railway:		
At Isabelle Place.....	A-2255	
At Belleperche Place.....	A-2256	

	Procedure File	Plan
Toronto Harbour Commission—Approval plans &c. for Bascule Bridge over Ship Canal at foot of Cherry Street, City of Toronto.	A-2232	P 575
Toronto, City of. do	do	do
Wentworth, County of, et al; Hamilton Street Railway Co. vs.—To abandon service on Delta Line and to operate omnibuses on King Street from Bartonville to the Delta.	A-2302	
Windsor, Essex & Lake Shore Electric Railway Association—Mortgage Deed of Trust to Guaranty Trust Co. of Canada	A-2413	
York, Township of—Approval plan &c. of "Bathurst Street Bridge." See "Forest Hill, Village of."		

MORTGAGES AND DISCHARGES

(Section 47, Chap. 225, R.S.O. (1927))

Windsor, Essex & Lake Shore Electric Railway Association—Mortgage Deed of Trust to Guaranty Trust Co. of Canada	A-2413
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APPLICATIONS TO THE BOARD FOR VALIDATION OF BY-LAWS UNDER SECTION 304 OF "THE MUNICIPAL ACT"

(NOTE.—Abbreviation "I.C." means Irregularities Cured; Abbreviation "I." means Irregularities Not Cured.)

Municipality	By-law No.	Purpose	Amount	Procedure File
Aurora, Town of	658	Local Improvements—Pavements	\$83,800 00 (I.C.)	A-2328
Aurora, Town of	659	Local Improvements—Pavements	20,000 00 (I.C.)	A-2329
Alexandria, Town of	453	Fire Engine	1,800 00 (I.)	A-2477
Arnprior, Town of	954	Certain indebtedness incurred for Local Improvements	7,117 89 (I.)	A-2591a
Bertie, Township of	1118	Waterworks Construction	62,905 51 (I.C.)	A-2055
Bertie, Township of	1121	Local Improvement—Pavement	7,342 19 (I.C.)	A-2086
Bertie, Township of	1122	Local Improvement—Pavement	18,777 09 (I.C.)	A-2087
Bowmanville, Town of	1194	Local Improvement—Pavement and Sewers	118,118 29 (I.C.)	A-2199
Bracebridge, Town of	506	Local Improvement—Pavement and Sewers	74,040 97 (I.C.)	A-2208
Brookville, Town of	1644	Collegiate Institute	325,000 00 (I.C.)	A-2466
Carleton Place, Town of	997	Local Improvements—Pavements and Bridge Construction	54,168 00 (I.)	A-2156
Chapple, Municipality of	447	Public School Purposes, S.S. No. 8, Mather	2,500 00 (I.C.)	A-2174
Carleton Place, Town of	1006	Local Improvements—Pavements	29,526 00 (I.C.)	A-2305
Carleton Place, Town of	1007	Bridge on Bridge Street	25,000 00 (I.C.)	A-2307
Coldwater, Village of	146	Local Improvements—Pavements	26,000 00 (I.C.)	A-2430
Crowland, Township of	199	Public School, S.S. No. 3	70,000 00	A-2522
Chapple, Municipality of	456	Public School Purposes, S.S. No. 8, Mather	1,000 00	A-2581
Esa, Township of	511 (amended)	Continuation School Purposes	170,000 00	A-2336
East York, Township of	1576	High School Purposes	4,547 25	A-2403
East York, Township of	1646	Waterworks Construction, Sec. "E"	25,000 00	A-2566
East York, Township of	1646	Building and Repair of Bridges	288,305 23 (I.C.)	A-2590
East Whitby, Township of	1044	Don Ravine Viaduct	15,845 06 (I.C.)	A-2143
East York, Township of	1786	Local Improvements—Sewers and Watermains	6,017 50 (I.C.)	A-2235
Fort Erie, Village of	665	Local Improvements—Sewers	38,863 50 (I.C.)	A-2236
Fort William, City of	2921 (Con.)	Local Improvements—Pavements	51,110 00 (I.C.)	A-2237
Fort William, City of	2926 (Con.)	Local Improvements—Sidewalks	150,000 00 (I.C.)	A-2397
Fort William, City of	2953 (Con.)	Sewage Disposal Plant	85,000 00	A-2217
Forest Hill, Village of	394	Waterworks System	20,000 00	A-2587
Glencoe, Village of	348	Hydro-Electric Light System &c.—Extensions	26,790 00 (I.C.)	A-2152
Goderich, Town of	36 (1929)	Local Improvements—Sewers	99,900 34 (I.C.)	A-2371
Kingsville, Village of	680	Highway Construction—1921, 1922, 1924, 1925, 1926, 1927 and 1928 (Corporation's share)	97,900 00	A-2415
Kingston, City of	23 (1929)	do	47,403 21	A-2419
Kingston, City of	32 (1929)	Local Improvements—Pavements		
Kincardine, Town of	994			

Lancaster, Township of.....	5 (1928)	Completion of Drainage Work in Townships of Lancaster and Charlottetburg.....	14,684 19 (I.C.)	A-2085
Millbrook, Village of.....	564	Local Improvements—Sewers and Pavements.....	22,856 43 (I.C.)	A-2218
Needing, Township of.....	482	Public School Purposes.....	11,444 00 (I.C.)	A-2119
Northumberland & Durham, Counties of	1195	County Road Construction in Towns of Bowmanville and Cambellford and Villages of Hastings and Millbrook.....	125,734 46 (I.C.)	A-2138
New Toronto, Town of.....	741	Sanitary Conveniences.....	16,000 00 (I.C.)	A-2167
North York, Township of.....	617	Extension of Hydro-Electric System—Area No. 1.....	100,000 00 (I.C.)	A-2201
North York, Township of.....	691	Local Improvements—Watermains.....	4,610 00	A-2202
North York, Township of.....	436	Local Improvements—Sidewalks.....	1,100 00 (I.C.)	A-2219
North York, Township of.....	722	Local Improvements—Sidewalks.....	4,010 00 (I.C.)	A-2220
North York, Township of.....	729 (Con.)	Local Improvements—Watermains.....	28,387 00	A-2249
Niagara Falls, City of.....	1722	Local Improvements—Sewers.....	7,373 00 (I.C.)	A-2254
Needing, Municipality of.....	491	Public School Purposes.....	2,000 00 (I.C.)	A-2364
North York, Township of.....	856	High School Purposes.....	190,000 00	A-2589
Oshawa, City of.....	1921	Watermains.....	46,740 00 (I.C.)	A-2170
Ottawa, City of.....	6639 (Con.)	Local Improvements—Sewers.....	6,583 56 (I.C.)	A-2304
Ottawa, City of.....	6629	Public School Purposes.....	380,000 00	A-2358
Oshawa, City of.....	1965	Purchase of Lands for Industrial Sites.....	10,000 00 (I.C.)	A-2550
Port Arthur, City of.....	1913	Vocational School.....	466,000 00 (I.C.)	A-2268
Paipooonge, Municipality of.....	233	Public School, S.S. No. 3.....	7,700 00	A-2394
Palmerston, Town of.....	672	Sewage Disposal Plant.....	27,000 00	A-2555
Renfrew, County of.....	1118	Highway Construction, 1928.....	30,000 00 (I.C.)	A-2122
Rainy River, Town of.....	301	Diesel Oil Engine in No. 2 Power House.....	50,000 00 (I.C.)	A-2168
Renfrew, Town of.....	1204 (Con.)	Local Improvements—Sewers.....	1,230 00	A-2456
Renfrew, Town of.....	1211 (Con.)	Local Improvements—Sidewalks.....	2,121 00	A-2457
Rolph, Buchanan, Wylie and McKay, Townships of.....	27	Public School in S.S. No. 6, of Township of Rolph.....	1,600 00 (I.C.)	A-2571
Sandwich West, Township of.....	829	Local Improvements—Pavements.....	28,050 96 (I.C.)	A-2194
Sandwich, Town of.....	1837 (Con.)	Local Improvements—Concrete Walks.....	91,602 52 (I.C.)	A-2295
St. Catharines, City of.....	3880	Local Improvements—Sewer.....	2,422 38 (I.C.)	A-2342
Sandwich, Town of.....	1848 (Con.)	Local Improvements—Watermains and Storm Sewer.....	24,279 72 (I.C.)	A-2353
Sandwich, Town of.....	1859 (Con.)	Local Improvements—Watermains, etc.....	9,630 48 (I.C.)	A-2354
Sandwich, Town of.....	1705	Local Improvement—Pavement.....	7,019 05	A-2402
Schrieber, Municipality of.....	149 (amended)	Waterworks Extensions.....	35,000 00	A-2360

APPLICATIONS TO THE BOARD FOR VALIDATION OF BY-LAWS UNDER SECTION 304 OF "THE MUNICIPAL ACT"

—Continued

(Note.—Abbreviation "I. C." means Irregularities Cured; Abbreviation "I." means Irregularities Not Cured.)

Municipality	By-law No.	Purpose	Amount	Procedure File
Sandwich, Town of	1887	Local Improvements—Pavement	30,935 62	(I. C.) A-2424
Stamford, Township of	319 (1929)	Local Improvements—Sewers	5,764 35	(I. C.) A-2488
Stamford, Township of	320 (1929)	Local Improvements—Sewers	32,960 82	(I. C.) A-2500
Stamford, Township of	321 (1929)	Local Improvements—Sidewalks and Watermains	6,225 35	(I. C.) A-2501
Stamford, Township of	326 (1929)	Local Improvements—Sewers	83,732 17	(I. C.) A-2516
Sault Ste. Marie, City of	1371 (amended)	Technical and Commercial High School Purposes	130,000 00	A-2572
Sault Ste. Marie, City of	1372 (amended)	Collegiate Institute Purposes	52,250 00	A-2574
Toronto, Township of	1074	Local Improvements—Road Construction	11,000 00	A-2222
Toronto, City of	12086	Widening Bloor Street	1,144,360 64	A-2458
Timmins, Town of	396	Waterworks Extensions	2,231 34	A-2494
Walkerville, Town of	1222	Market Building	28,000 00	(I. C.) A-2171
Walkerville, Town of	1249	Incinerator	15,500 00	A-2180
Walkerville, Town of	1259	Suburban Roads	53,164 27	A-2195
Welland, City of	615	Local Improvements—Storm Sewer	59,786 00	(I. C.) A-2242
Welland, City of	620	Local Improvements—Pavements	194,215 40	(I. C.) A-2363
West Lorne, Village of	274	Community Hall	10,000 00	(I. C.) A-2464
Wentworth, County of	883 (amended)	Highway Construction, 1929	10,000 00	(I. C.) A-2506
Wentworth, County of	895	Children's Shelter	17,500 00	(I. C.) A-2558
West Ferris, Township of	143	Purchase of Land, Opening of Streets, etc.	3,300 00	A-2577
West Ferris, Township of	150	Local Improvements—Watermain	10,700 00	A-2588
York, Township of	10029	Local Improvements—Watermains	41,419 32	A-2163

LIST OF BY-LAWS APPROVED BY THE BOARD UNDER SUBSECTION (2) OF SECTION 399 OF "THE MUNICIPAL ACT"

Municipality	By-law No.	Purpose	Amount	Procedure File
Ayr, Village of	335	Extensions to Hydro-Electric System	\$5,000 00	A-2146
Almonte, Town of	757	Extensions and Additions to Electric System	3,500 00	A-2513
Fonthill, Village of	120	Additions and alterations to Hydro-Electric Power Distribution System		
Goderich, Town of	36 (1929)	Hydro-Electric Extensions	2,500 00	A-2531
Hamilton, City of	3796	Waterworks Extensions	20,000 00	A-2586
Leamington, Town of	1348	Waterworks Extensions and Improvements	42,211 00	A-2262
Merriton, Town of	434	Extensions to Hydro-Electric System	31,600 40	A-2341
Niagara, Township of	663	Extensions to Hydro-Electric System	12,000 00	A-2204
Newmarket, Town of	614	Extensions to Hydro-Electric System	1,500 00	A-2131
Niagara, Town of	947	Improvements &c. to Hydro-Electric System	10,000 00	A-2421
Orangeville, Town of	1563	Completion of Sewage Disposal Plant	6,000 00	A-2576
Stratford, City of	3285	Extensions to Gas Plant	13,000 00	A-2326
Toronto, City of	12196	Waterworks Extensions	14,000 00	A-2330
Toronto, City of	12216	Waterworks Extensions	14,900 00	A-2286
Toronto, City of	12128 (amended)	Waterworks Extensions	12,700 00	A-2287
Toronto, City of	12284	Waterworks Extensions	3,400 00	A-2308
Toronto, City of	12272	Hydro-Electric Extensions	1,906,000 00	A-2369
Toronto, City of	12283	Waterworks Extensions	171,000 00	A-2375
Toronto, City of	1029	Waterworks Extensions	107,000 00	A-2376
Thorold, Town of	12371	Waterworks Extensions &c.	4,215 16	A-2511
Toronto, City of	12428	Waterworks Extensions	31,000 00	A-2541
Toronto, City of	281	Waterworks Extensions	12,400 00	A-2584
Warton, Town of		Waterworks Extensions	1,601 78	A-2181

MISCELLANEOUS MATTERS

ANNEXATIONS

	Procedure File
Peterborough, City of Annexation to of part Township (North) Monaghan— Petition of Toronto Savings & Loan Co., et al.	A-2166
Weston, Town of Annexation to of part Township North York (Part Lot 8, Con. V.)	A-2303
Kitchener, City of Annexation to of part Township Waterloo—Petition Alex. Schafer, et al.	A-2323
Hamilton, City of Annexation to of part Townships Barton and Ancaster (West Hamilton)—Petition A. G. Blaney, et al.	A-2510
Peterborough, City of Annexation to of part Township North Monaghan— Petition Jas Murtry (Executor Jas. Curran Estate), et al.	A-2521
Morley, Municipality of Annexation to of Township Morley Additional.	A-2559
Hamilton, City of Annexation to of part Township Ancaster (West Hamilton) —Petition A. D. Blaney, et al.	A-2579

ARBITRATIONS

(References by the Minister of the Department of Public Highways)

Etobicoke, Township of Compensation by Department of Public Highways in respect of certain property of James McNeice (Part Block "Y," Registered Plan 1625, York)	A-2098
Etobicoke, Township of Wm. Kingsbury (Part Block "F," Registered Plan 1572, York)	A-2099
Etobicoke, Township of Edward Stanners (Part Block "Z," Registered Plan 2130, York)	A-2100
Etobicoke, Township of F. J. Sutherland (Part Lot 19, Registered Plan 1176)	A-2209
Etobicoke, Township of T. J. Chamberlain (Parts Blocks "Y" and "Z," Registered Plan 2130)	A-2210
(Under Section 77a of "The Highway Improvement Act" as enacted by Sec. 6, Chap. 18, Ontario Statutes, 1928 (amended by Sec. 6, Chap. 17, Ontario Statutes, 1929).)	
Wade, Henry Part Lot 16, Con. I, Township Pickering—overflow of waters of Duffin's Creek by reason of construction of embankment	A-2451
Morgan, Edwin Part Lot 33, B.F. Concession (3rd Range), Township Pickering—damages re building of culvert and conse- quent diversion of waters of creek known as "Rouge River"	A-2467

ASSESSMENT APPEALS

	Amount	
Green, Caleb, vs. City of Ottawa—(Land and Buildings)	\$61,700 00	A-2052
Bolton Telephone Co. vs. Township Albion	(Withdrawn)	A-2373
Township of Scarborough vs. Estate of George Bell—(Land)	\$59,390 00	A-2378
Canadian National Railway Co. and International Bridge Co. vs. Town of Bridgeburg—(Bridge)	600,000 00	A-2459
Northern Telephone Co., Ltd., vs. Township of Coleman	(Withdrawn)	A-2429a
Tisdale, Township of, vs. Hollinger Consolidated Gold Mines, Ltd.— (Buildings and Equipment)	34,430 00	A-2487
Hollinger Consolidated Gold Mines, Ltd., vs. Township of Tisdale— (Buildings, Equipment, &c.)	147,614 00	A-2487a
Barton Bonds & Investments, Ltd., vs. City of Hamilton—(Income)	63,610 00	A-2552
Toronto, City of, vs. Toronto Terminal Railway Co.—(Land and Building)	200,470 00	A-2596
General Accident Assurance Co. of Canada, vs. City of Toronto—(Land and Building)	576,500 00	A-2597
Guardian Realty Co. of Canada, Ltd., vs. City of Toronto—(Land and Building)	1,593,500 00	A-2598

BILLS (FINANCIAL)

(Rule 61a of the House)

Richmond Hill, Village of	Bill No. 21, 1929	Procedure File A-2095
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BRIDGES

By-laws approved under Section 297 (2) (c), Chapter 233, R.S.O. 1927)

Sault Ste. Marie, City of	Approval proposed By-law re Bridge on 2nd line, between People's Road and Korah Road boundary line between City and Township of Korah; and Bridge in City on Queen Street between John and Andrew Streets	A-2214
Oshawa, City of	Approval By-law 1974—Construction of Simcoe Street Bridge and Ross' Bridge on boundary line (3rd Con.) between Township East Whitby and City	A-2425

BRIDGES

Relief from Rebuilding—(Section 469 (9) of Chapter 233, R.S.O. 1927)

Glenelg, Township of	"McNab's Bridge" on base line at rear of Lot 51, Con. II, east of Garafraza Road	A-2311
Glenelg, Township of	"Keyland's Bridge" on sideroad at Lot 40, Con. II, north of the Durham Road	A-2312
Glenelg, Township of	"McLaughlan's Bridge" on sideroad at Lot 50, Con. II, north of the Durham Road	A-2313

BY-LAWS

Status of Township in unorganized territory, giving it authority to pass those referred to in Section 415a of "The Municipal Act" (as enacted by Section 11, Chapter 58, Ontario Statutes, 1929)		
Teck, Township of		A-2352

CEMETERIES

Incorporation of Additional Land in, etc. (Section 43, Chapter 317, R.S.O. 1927)

Raleigh, Township of	Acre of unclaimed land adjacent to cemetery of	A-2398
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DETACHMENT OF FARM LANDS FROM TOWN OR VILLAGE

(Section 21, Chapter 233, R.S.O. 1927)

Bothwell, Village of	Lands of J. H. C. Crowell, and annexation of same to Township of Zone	A-2449
Whitby, Town of	Lands of W. A. Bothwell, et al, and annexation of same to Township of Whitby	A-2540

EXTENSION DEBENTURE ISSUE PERIOD

(Section 296 (11) (12), Chapter 233, R.S.O. 1927)

Municipality	By-law No.	Purpose	Amount	
North York, Township of	436	Sidewalk	\$1,100 00	A-2175
Stamford, Township of	86 (1926)	Local Improvements—Sidewalks and watermains	17,484 52	A-2475
Stamford, Township of	87 (1926)	Local Improvements—Sewers	21,609 50	A-2476

EXTENSION OF TIME TO PASS BY-LAWS

(Section 288 (5), Chapter 233, R.S.O. 1927)

Municipality	By-law No.	Purpose	Amount	Procedure File
Nelson, Township of.....	869	Gas Franchise to United Fuel Investments, Ltd.....		A-2112
Weston, Town of.....	1004	Additional Sewers.....	\$100,000 00	A-2114
East Whitby, Township of.....	1044	Repairs to and Building of Bridges	25,000 00	A-2566a
Whitby, Township of.....	1194	Reconstruction of Bridges, etc....	30,000 00	A-2583

FORMS

For use on submission of a By-law or question to votes of electors under Section 269, et seq. of "The Municipal Act"; also Form to borrow money by issue of debentures on the instalment plan.....	A-2224
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THE (MUNICIPAL) FRANCHISES ACT

(Section 4, Chapter 240, R.S.O. 1927)

Etobicoke, Township of....By-law 3353—Franchise to Consumers' Gas Co. of Toronto	A-2234
Ancaster, Township of....Franchise to Dominion Natural Gas Co., Ltd.—Objection by City of Hamilton.....	A-2301

HIGHWAYS—NARROW

(Section 490 (2) of "The Municipal Act")

York, Township of.....Extension of Amherst Avenue to south limit of Lot 25, at width of 61 feet.....	A-2047
Sault Ste. Marie, City of...Approval By-law 1368—Closing portion of Wilton Crescent	A-2084
Preston, Town of.....Extension of First Avenue from Front Street to Guelph Street, at width of 40 feet.....	A-2109
Torbolton, Township of...Approval By-law 579—Opening of road across Con. IV (part Lot 13), at width of 40 feet.....	A-2151
Hamilton, City of.....By-law 3805—Opening, etc., of Wexford, Cumberland and Central Avenue, at width of 60 feet.....	A-2269
Kitchener, City of.....By-law 2083—Opening of Hall's Lane, between Benton and Eby Streets, at width of 20 feet.....	A-2289
Longueuil, Township of...Opening of Highway—Alternative to portion of "Bay" Road, at width of 50 feet.....	A-2299
Kitchener, City of.....By-law 2097—Opening of Hall's Lane between Benton and Eby Streets, at width of 20 feet.....	A-2377
Saugeen, Township of....Opening of highway across Lots 32 and 33, Lake Range...	A-2406
Kitchener, City of.....By-law 2108—Opening, etc., of Hall's Lane between Benton and Eby Streets, at width of 20 feet.....	A-2454
Hamilton, City of...By-law 3841—Opening of Frid Street from Chatham Street to Main Street, at width of 50 feet.....	A-2462
Jackson, Francis N.....Approval plan showing private roads, 20 feet in width, in front of Lot 13, Con. A, Township of Charlotteville, County of Norfolk.....	A-2562
Kitchener, City of.....Extension of Brock Street from westerly limit to West Street, at width of 50 feet.....	A-2592

HIGHWAYS—SUBURBAN

(Establishing, Closing, &c.)

(Section 12 of "The Planning and Development Act")

(Chapter 236, R.S.O. 1927)

Yarmouth, Township of...Approval By-law 1117—Closing portion of Park Avenue...	A-2080
Malden, Township of.....Approval of diversion of River Front Road from southerly limit of Town of Amherstburg to Beaudoin sideroad....	A-2349
Sandwich, Town of.....Approval widening of Sandwich Street between Rosedale Avenue and Detroit Street.....	A-2481

INCORPORATIONS

(Section 18 of "The Municipal Act," Chapter 233, R.S.O. 1927)

Smooth Rock Falls, Town of—Incorporation of portion of Township of Kendrey A-2113

INTEREST INCREASE BY-LAWS

Approval of, under section 300 of "The Municipal Act"
(Chap. 233, R.S.O., 1927)

Municipality	Deben- ture By-law	Purpose	Interest Increase By-law	Rate	Amount	Pro- cedure File
Lincoln, County of	854	Road construction . . .	871	4½%—5%	\$15,000 00	A-2057
Lincoln, County of	855	Road construction . . .	873	do	62,000 00	A-2058
Kitchener, City of	2028	Public School Pur- poses	2063	do	92,000 00	A-2155
Toronto, City of	12123	Sewage disposal plant	12197	do	286,000 00	A-2270
Toronto, City of	12128	Revenue mains	12198	do	3,400 00	A-2271
Toronto, City of	11430	Toronto Public Lib- rary	12199	do	400,000 00	A-2272
Toronto, City of	11868	West End Technical School	12200	do	819,000 00	A-2273
Toronto, City of	11869	Public school purposes	12201	do	658,000 00	A-2274
Toronto, City of	11936	Extension Electric Power Distribution Plant	12202	do	1,046,000 00	A-2275
Toronto, City of	11969	Sewers	12203	do	1,061,000 00	A-2276
Toronto, City of	12119	High school purposes	12204	do	299,000 00	A-2277
Toronto, City of	12120	Public school purposes	12205	do	324,000 00	A-2278
Toronto, City of	12121	Extension of site of College Street Lib- rary	12206	do	35,000 00	A-2279
Toronto, City of	12122	To enlarge Runn- meade Pranch Lib- rary	12207	do	20,000 00	A-2280
Toronto, City of	12124	Provincial Road Con- struction	12208	do	212,000 00	A-2281
Toronto, City of	12125	Highway and track reconstruction by T.T.C.	12209	do	172,000 00	A-2282
Toronto, City of	12126	Waterworks exten- sions	12210	do	3,000,000 00	A-2283
Toronto, City of	12127	Extension of Bathurst Street	12211	do	700,000 00	A-2284
Toronto, City of	11936	Extension of Hydro- Electric Distribu- tion System	12202	do	1,020,000 00	A-2297
Schieber, Municipality of	149	Waterworks exten- sions	154	5%—6%	35,000 00	A-2359
Brantford, City of	2124	Collegiate Institute purposes	2202	4½%—5%	187,000 00	A-2533

LEGISLATION (SPECIAL)

Essex Border Utilities Commission—Appeal by City of Windsor re apportionment of
cost of proposed subway under Canadian National Railway at Wyandotte Street,
Town of Ford City A-2285

LOCAL IMPROVEMENTS—PETITIONS AGAINST

(Section 9 of "The Local Improvement Act")

Municipality	Petitioner	Work	Procedure File
Oshawa, City of	Robt. Brooks, et al.	Extension of William Street to Oshawa Boulevard	A-2046
Toronto, City of	Mary E. Wicketts, et al.	Concrete sidewalk south side Pine Avenue, between Balsam and Beech Avenues	A-2158
Hamilton, City of	R. Steinberg, et al.	Pavement on Ferrie Street, between James Street and Victoria Avenue	A-2198
Toronto, City of	G. W. P. Hood, et al.	Sidewalk on Clendennan Avenue, between Glendonwynne Avenue and Glenlake Avenue	A-2221
Guelph, City of	J. W. Lyon, et al.	Cement concrete sidewalk on King Street from Arthur Street to Eramosa Road	A-2225
Guelph, City of	Robt. E. Danison, et al.	Cement concrete sidewalk on Palmer Street from Arthur Street to King Street	A-2226
Belleville, City of	Alfred Gillen, et al.	Apportionment of cost of Dundas Street East pavement	A-2293
Hamilton, City of	Thos. Lees, et al.	Widening of Main Street from James to Queen Streets	A-2296
Kitchener, City of	D. Christener, et al.	Resurfacing Park Street from Wilmot Street to C.N. Ry.	A-2319
Kitchener, City of	U. L. Cober, et al.	Pavement on Samuel Street between Frederick and Burbacher Streets	A-2320
Midland, Town of	Annie M. Campbell, et al.	Pavement on King Street from Colborne Street to southerly Town Limit	A-2321
Kitchener, City of	Jas. E. Gibson, et al.	Pavement on Mill Street from Queen Street to railway tracks	A-2333
Toronto, City of	P. Greenshields, et al.	Pavement on Perth Avenue from Rovee Avenue to C.P.R. tracks	A-2335
Tweed, Village of	E. R. Huyck, et al.	Watermains on Victoria and other Streets	A-2338
Tweed, Village of	E. R. Huyck, et al.	Sewers on Victoria and other Streets	A-2339
Hamilton, City of	Mrs. May McPherson, et al.	Sewer on Houghton Avenue and Cumberland Avenue	A-2332
Ottawa, City of	Aug. Boehmer, et al.	Pavement on Crichton Street from Charles Street to Beechwood Avenue	A-2357
Hamilton, City of	D. Crosthwaite, et al.	Widening of King Street from Ottawa Street to Kenilworth Avenue	A-2417
Midland, Town of	Mrs. Annie Scott, et al.	Manner of construction of sewer on King Street	A-2420
Riverside, Town of	Mary E. McKinley, et al.	Opening of McKinley Avenue and construction of sewer	A-2422
Kitchener, City of	Alvin J. Huth, et al.	Watermains on Hulbach Street from Gilmour Street to Wood Street	A-2433
Hamilton, City of	C. E. Burkholder, et al.	Cement walk and curb on Park Row Street from King Street to Cumberland Avenue	A-2453
Perth, Town of	Fred J. Moore, et al.	Pavement on Sinclair Street from North Street to Clyde Street	A-2484
Perth, Town of	W. J. Saul, et al.	Pavement on Lewis Street from Peter Street to the River	A-2508
Riverside, Town of	E. J. Seguin, et al.	Pavement on Ottawa Street from Jefferson Boulevard to Lauzon Road	A-2515
Hamilton, City of	Mrs. Drucilla Horgan, et al.	Opening, etc., of East 31st Street from northerly terminus to Crocket Street	A-2524

LOCAL IMPROVEMENTS—PETITIONS AGAINST—CONTINUED

Municipality	Petitioner	Work	Procedure File
Hamilton, City of.....	Mrs. Emma Webber.....	Sidewalk on north side of Webber Avenue from Victoria Avenue easterly 225 feet.....	A-2538
Toronto, City of.....	John Wickett, et al.....	Pavement on Sycamore Place....	A-2557
Hamilton, City of.....	Ada Thompson, et al.....	Extension of East 31st Street from northerly terminus to Crockett and Concession Streets.....	A-2578
Riverside, Town of.....	Mary E. McKinley, et al.....	Opening of Ottawa Street from Riverdale Avenue to east limit of Farm Lot 138.....	A-2585

LOCAL IMPROVEMENTS—PART ONLY OF WORK

(Section 18 of "The Local Improvement Act")

Municipality	Amending By-law	Original By-law	
York, Township of.....	9988	9531	A-2088
Niagara Falls, City of.....	1694	1594	A-2123
Toronto, City of.....	11997	11671	A-2124
Toronto, City of.....	11998	11798	A-2125
Toronto, City of.....	11999	11511	A-2126
Toronto, City of.....	12000	11812	A-2127
Toronto, City of.....	12001	11329	A-2128
Toronto, City of.....	12002	11330	A-2129
Toronto, City of.....	12003	11331	A-2130
Toronto, City of.....	11996	11332	A-2132
New Toronto, Town of.....	754	665	A-2137
Mimico, Town of.....	712	657	A-2223
St. Catharines, City of.....	3893	3827	A-2257
Toronto, City of.....	12273	11985	A-2367
Toronto, City of.....	12274	10554	A-2382
Vaughan, Township of.....	1234	1220	A-2407
Toronto, City of.....	12364	11717	A-2551

LOCAL IMPROVEMENT—DEVIATION IN COURSE OR LOCATION OF HIGHWAY

(Section 19 of "The Local Improvement Act")

Toronto, City of—Approval By-law 11894, amending Local Improvement Construction By-law 11635 in respect of turning basin in lane between Peterborough and Auburn Avenues, east of Elmwood Place.....	A-2060
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LOCAL IMPROVEMENTS—APPORTIONMENT OF COST

(Section 26 (3) of "The Local Improvement Act" as amended by

Chapter 38, Section 2, Ontario Statutes, 1928)

Municipality	By-law No.	Purpose	Procedure File
Durham, Town of	882	Pavement on Garafraxa Street.	A-2162
Leaside, Town of	212	Pavement on Millwood Road.	A-2244
Aurora, Town of	651	Pavement on Yonge Street.	A-2329a
Aurora, Town of	641, 642, 643 644, 646, 648 649	Pavements.	A-2328a, b, c, d, e, f, g.
Drayton, Village of	383	Portion of pavements and curbsings, Wellington Street.	A-2389
Drayton, Village of	385	Portion of pavements and curbsings, Wellington Street.	A-2390
Coldwater, Village of	123 and 131	Pavement on Main Street.	A-2440
Coldwater, Village of	133 and 134	Pavement on Gray Street.	A-2441
Coldwater, Village of	140 and 141	Pavement on Eplett Street.	A-2442
Sandwich, Town of	1754 as amended by 1890	Pavement on Mill Street.	A-2452
Sandwich, Town of	1900	Pavement on Sandwich Street.	A-2483
Stamford, Township of	316 (1929)	Sidewalks.	A-2490
Stamford, Township of	317 (1929)	Sidewalks.	A-2491
Durham, Town of	894	Pavements, Lambton Street.	A-2530

"THE NORTHERN FIRE RELIEF ACT, 1923"

Haileybury, Town of	Addition to High and Technical School.	\$55,000 00	A-2081
Haileybury, Town of	Pavement and sidewalk on Ferguson Avenue.	7,800 00	A-1831a
Haileybury, Town of	Cement walk on west side Georgina Avenue, northerly from Probyn Street.	559 50	A-2356

PARKS—SETTING ASIDE PART OF FOR ATHLETIC PURPOSES

(Section 12 of "The Public Parks Act," Chapter 248, R.S.O. 1927)

Kitchener, Board of Park Management of City of—By-law No. 20—Erection of building on certain Park lands to be used as boathouse and for amusements.			A-2154
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RESTRICTED AREAS

APPROVAL OF BY-LAWS ESTABLISHING

(Section 398 of "The Municipal Act" (Chapter 233, R.S.O. 1927))

Municipality	By-law No.	Area	Procedure File
Toronto, City of	11952	Huron Street, between Bloor and Dupont Streets.	A-2061
Toronto, City of	11953	Brunswick Avenue, between Bloor and Dupont Streets.	A-2062
Toronto, City of	11954	Dalton Road, between Bloor Street and Lowther Avenue.	A-2063
Toronto, City of	11955	Kendal Avenue, between Spadina Road and Dupont Street.	A-2064
Toronto, City of	11956	Walmer Road, between Bernard Avenue and Dupont Street.	A-2065

RESTRICTED AREAS—CONTINUED

Municipality	By-law No.	Area	Procedure File
Toronto, City of.....	11957	Spadina Road, between Bloor Street and Dupont Street.....	A-2066
Toronto, City of.....	11958	Madison Avenue, between Bloor Street and Dupont Street.....	A-2067
Toronto, City of.....	11959	Bedford Road, between Bernard Avenue and Davenport Road.....	A-2068
Toronto, City of.....	11960	Admiral Road, between Lowther Avenue and St. George Street.....	A-2069
Toronto, City of.....	11961	Wells Street, between Howland and Kendall Avenues.....	A-2070
Toronto, City of.....	11962	Bernard Avenue, between Brunswick Avenue and Bedford Road.....	A-2071
Toronto, City of.....	11963	Tranby Avenue, between Bedford Road and Avenue Road.....	A-2072
Toronto, City of.....	11964	Boswell Avenue, between Bedford Road and Avenue Road.....	A-2073
Toronto, City of.....	11965	Elgin Avenue, between Bedford Road and Avenue Road.....	A-2074
Toronto, City of.....	11966	Howland Avenue, between Bloor Street and Dupont Street.....	A-2075
Toronto, City of.....	11986	Palmerston Avenue, between College Street and Bloor Street.....	A-2092
Ottawa, City of.....	6571	Carling Avenue, between Bank Street and Bronson Avenue.....	A-2094
Forest Hill, Village of.....	337	Superior Avenue, Riddell Avenue and part Briar Hill Avenue.....	A-2142
Sudbury, Town of.....	1124	Elm Street, et al.....	A-2205
North York, Township of....	669	That part of Township known as "Kingsdale".....	A-2200
Ottawa, City of.....	6618	Portion of Carling Avenue.....	A-2215
Sandwich West, Township of...	836	Areas 1, 2 and 3, described in By-law.....	A-2228
East Whitby, Township of....	1043	Simcoe Street northerly from south limits of Lots 10 and 11, 1,722 feet.....	A-2248
Ottawa, City of.....	6640	Area bounded by Main Street, etc.....	A-2261
Forest Hill, Village of.....	358	Hopewell Avenue, Wembley Road and Whitmore Avenue.....	A-2291
Windsor, City of.....	3928	Ouellette Avenue—Regulation of height and bulk of buildings.....	A-2300
Swansea, Village of.....	152	Mossom Road, etc.....	A-2318
Toronto, City of.....	12259	Laxton Avenue.....	A-2351
York, Township of.....	10232	Dennis Avenue and other highways.....	A-2383
Ottawa, City of.....	6705	South side Stanley Avenue, between Union Street and C.P.R. right-of-way.....	A-2400
Sturgeon Point, Village of....	118	Area west of and including Lot 5, Plan 65.....	A-2499

AMENDMENT OR REPEAL (IN PART) RESTRICTED AREA BY-LAWS

Section 39S (2-b) of "The Municipal Act"

Municipality	Amending By-law	Original By-law	Amendment	
Toronto, City of.....	11938	11796	Exempting south side of College Street, between Shaw and Crawford Streets.....	A-2049
Toronto, City of.....	12035	11309	To permit erection of double duplex dwelling on land adjoining 100 Tyndall Avenue, to south.....	A-2141
Toronto, City of.....	12042	9651	Conversion of No. 216 Cottingham Street into duplex dwelling house..	A-2165
Toronto, City of.....	12048	9285	Exempting land north of Austin Terrace, between Walmer and Spadina Roads.....	A-2172
	amending 11668	9411		

AMENDMENT OR REPEAL (IN PART) RESTRICTED
AREAS BY-LAWS—CONTINUED

Municipality	Amending By-law	Original By-law	Amendment	Procedure File
East York, Township of	1518	1243 as amended by 1347	Addition of certain districts (Clause "B")	A-2190
Port Colborne, Town of	36 (1929)	28 (1924)	Eliminating Section "C"	A-2213
Ford City, Town of	892	647	Enlargement as to character of buildings to be erected	A-2238
Toronto, City of	12188	8834	Conversion of No. 14 Prince Arthur Avenue into a duplex	A-2267
Kitchener, City of	2087	1823 as amended by 1834-5	Addition of Business Districts (Section 4) to Division "C"	A-2290
Forest Hill, Village of	362	112	Amendment of Industrial Area	A-2292
Toronto, City of	12223	8880	Erection of duplex dwelling immediately east of 190 Lowther Avenue	A-2309
Toronto, City of	12257	8815	Conversion of 130 Roxborough Street West into duplex	A-2350
Stratford, City of	3290	2740	Use of Lot 36, Canada Co. Survey as gas station	A-2361
Port Colborne, Town of	43 (1929)	28 (1924)	Addition of area	A-2395
Kitchener, City of	2103	1823 as amended by 1834-5	Additions to light Industrial District	A-2429
Toronto, City of	12347	8867	Conversion of northwest corner of Avenue Road and Bernard Avenue into store and apartments	A-2486
Forest Hill, Village of	405	285	Erection of apartment houses on Lonsdale Road, west of Spadina Road	A-2498
Forest Hill, Village of	421	285	Erection of duplex and apartment houses on Thelma Avenue and duplex houses on south side of Coulson Avenue	A-2514
Cobourg, Town of	1421	1375	Lot at corner of King and Ontario Streets	A-2539
Kitchener, City of	2119	1823 as amended by 1834-5	Changing corner of Strange and Cherry Streets to business zone	A-2573a
Kitchener, City of	2125	do	Changing part of Victoria Street to light industrial district	A-2573b
Kitchener, City of	2126	do	Changing part of Queen Street south to business zone	A-2573c

SEWAGE AND SEWAGE DISPOSAL WORKS

(Section 95 of Chapter 262, R.S.O. 1927)

Kitchener, City of—By-law No. 2059—Outfall sewer and sewage disposal plant	A-2834
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SINKING FUNDS

APPROVAL OF BY-LAWS FOR INVESTMENT OF

(Section 317 of "The Municipal Act")

Welland, City of Sinking Fund By-law 624—Debenture By-law 615, Local Improvement (Storm sewer), \$59,786.00	A-2343
Arnprior, Town of Sinking Fund By-law 962—Debenture By-law 954, Local Improvements, certain indebtedness for, \$7,117.87	A-2591

TAX RATE

APPROVAL OF FURTHER DEBT, ETC., WHERE RATE TOO HIGH

(Section 306, Subsection (2) of "The Municipal Act")

Municipality	By-law No.	Purpose	Amount	Procedure File
Haileybury, Town of.....	992	High School purposes.....	\$55,000 00	A-2081a
Kenora, Town of.....	434	Purchase of Park lands.....	3,000 00	A-2185
Merritton, Town of.....	1007	Extension to Hydro-Electric System	12,000 00	A-2203
Carleton Place, Town of.....	531	Bridge on Bridge Street.....	25,000 00	A-2306
Shuniah, Municipality of.....	533	Purchase of gravel lands.....	700 00	A-2495
Shuniah, Municipality of.....		Municipality's share of cost of gravelling John Street road, Township of McIntyre.....	5,000 00	A-2496
Crowland, Township of.....	199	Public School purposes, S.S. No. 3..	70,000 00	A-2429
Alexandria, Town of.....	453	Fire engine.....	1,800 00	A-2535
Niagara, Town of.....	946	Waterworks extensions.....	6,500 00	A-2543
Thorold, Town of.....	1029	Waterworks extensions.....	4,215 16	A-2511a
Thorold, Town of.....	1027	Waterworks filtration plant.....	61,117 26	A-2547
Palmerston, Town of.....	672	Sewage disposal plant.....	27,000 00	A-2556

TOWNS ERECTED INTO CITIES

(Section 19 of "The Municipal Act")

Ford City, Town of.....	A-2091
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WARDS, DIVISION OF CITIES, ETC., INTO

(Section 44, Chapter 233, R.S.O. 1927)

Ottawa, City of.....	Change in boundaries of Wards lying west of Rideau Canal, and creation of two new Wards—Elmdale and Riverdale.....	A-2294
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WAR MEMORIALS AND PATRIOTIC OBJECTS

(Section 396 (30) of "The Municipal Act")

Elora, Village of.....	By-law No. 767—\$2,500 for War Memorial.....	A-2405
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WATERWORKS

Municipality	By-law No.	Purpose	
Etobicoke, Township of.....	3308	Water Area No. 12.....	A-2079
Thorold, Township of.....	301	Water Area No. 1.....	A-2082
Oshawa, City of.....	1921	Watermains—\$46,470.00.....	A-2120
East York, Township of.....	1410	Watermains, Waterworks Section "E".....	A-2135
Thorold, Township of.....	312	Watermains, etc., Water Area No. 1—\$31,214.72	A-2164
East York, Township of.....	1386	Waterworks Area, Section "E".....	A-2239
East York, Township of.....	1646	Watermains, Waterworks Area, Section "E"— \$4,547.25.....	A-2381
Oshawa, City of.....	1962	Watermains, Cadillac Avenue, etc.....	A-2455
Essex Border Utilities Com...	67	Extension of watermain on Randolph Avenue (Townships of Sandwich West and South)— \$67,300.....	A-2480
Timmins, Town of.....	387	Waterworks construction.....	A-2492
Timmins, Town of.....	396	Waterworks construction—\$2,231.34.....	A-2493
Etobicoke, Township of.....	3450	Water Area No. 13, Establishment of.....	A-2536
Etobicoke, Township of.....	3471	Water Area No. 14, Establishment of.....	A-2537
Oshawa, City of.....	1976	Construction of watermains.....	A-2565

PLANS OF LAND SUBDIVISIONS

Approved by the Board under "The Planning and Development Act,"
"The Land Titles Act" and "The Registry Act"

Owner	Description	Procedure File
Bar Point Land Co., Ltd.	Part Block "Y," Plan No. 736, Township Malden, County Essex.	A-2446
Brown, Richard D.	Part Lot 16, Gull River Range, Township Bexley, County Victoria.	A-2595
Collins, J. Upper, et al.	Part Township Lot 142, Lot 15 and part Lots 18 and 19, Registered Plan No. 49, Township Stamford, County Welland.	A-2266
Campbell, J. M.	Part L.K. 55, east side of Lake Malachi, District Kenora (L.T.A.).	A-2368
Clark, Janet H.	L.K. 72, east side of Lake Malachi, District Kenora (L.T.A.).	A-2391
Consolidated Toronto Land Corporation, Ltd.	Part Block A, Plan 2581, York, and part Lot 12, Con. II, Township Etobicoke, County York.	A-2432
Colquhoun, Frances Bertha.	Part E. $\frac{1}{2}$ Lot 6, Con. I, Township Cornwall, County Stormont (East Lorneville).	A-2575
Dawson, H. W.	Part Registered Plan "B. 23," part Lot No. 4, Con. I, west of Hurontario Street, Township Chinguacousy, Town of Brampton.	A-2216
Excelsior Land Co., Ltd.	Parts Lots 8 and 9, Kingsmill Reserve, Township Etobicoke, County York.	A-2404
Eldridge, Francis W., et al.	Part Lot 9, Front Concession, Township Sarnia, County Lambton ("The Registry Act").	A-2512
Essex Border Utilities Commission.	Extension of Urban Zone (P. 588).	A-2564
Finnegan, Jno. Edw., et al.	Part Block 23, and Lots 2 and 3, west side of Scott Street, Village of Frankford, County Hastings.	A-2157
Fulton, A. M., et al.	Parts Lots "A," etc., Concessions III and IV, Township Bexley, County Victoria.	A-2414
Fee, Francis Wilbert.	Parts N.W. $\frac{1}{4}$ and N.E. $\frac{1}{4}$ of Lot 12, Con. VII, and adjoining Concession Road Allowance, Township Emily, County Victoria (Fee's Landing) (P. and D. Act and Registry Act).	A-2489
Groves, Josephine, et al.	Amendment to part of Registered Plan 226, Township Scugog, County Ontario.	A-2076
Goodman, C. M.	Part Lot 26, Con. V, and part Lot 26, Con. VI, Township Stephenson, District Muskoka.	A-2310
Home Smith & Co.	Parts Registered Plans M-471, M-443, M-356 and 2445, east and west of the Kingsway, between Bloor and Queen Streets, Village of Swansea, County York, Township York.	A-2173
Henry, Flora M.	Part Lot 26, Con. IX, Township Flos, County Simcoe ("Van Vlack" subdivision) (Registry Act).	A-2374
Hastings, Robt. Wm.	Lot No. IV, Island No. "A-1" in Seskinika Lake, Township Grenfell, District Temiskaming (L.T.A.).	A-2528
Islington Land Co.	Part Lot 19, Con. I, N.D., Township Etobicoke, County York.	A-2288
Kempfenfeldt Land Co.	Amendment of Plan 682—Part Broken Lot 27, Con. IV, Township Innisfil, County Simcoe (Registry Act).	A-2509
Kitchener Separate School Board.	Parts Lots 1, 2, 8 and 9, Plan 218, part Doehn Street which has been closed and part Lot No. 1, G.C.T., City of Kitchener.	A-2520
Lawrason, Jno. Wilkie.	Part Lot 16, Con. I, Township West Flamboro, Town of Dundas, County Wentworth.	A-2418
Langford, Henry, Estate of.	Amendments of Plan M. 129, Land Titles Office, Kenora, being plan of location D90 on Treaty Island (P. and D. Act and L.A.A.).	A-2582
Mulhern, Jno.	Part Lot 98, Township Stamford, County Welland	A-2148
Minster, Michael.	Part Lot 20, B. Weber's Survey, and part Lot 494, Grange's Survey, City of Kitchener.	A-2331
Mullen, J. Nowell.	Lot 38, Plan 240, Town of Amherstburg, Township of Malden, County Essex.	A-2372

PLANS OF LAND SUBDIVISIONS—CONTINUED

Owner	Description	Procedure File
MacKay, Letitia Lizzie.	Lot 4, Con. III, Township Barton (now in City of Hamilton), County Wentworth.	A-2431
Matteer, John.	Part Lot No. 25, Con. IV, Township Innisfil, County Simcoe.	A-2478
McGrogan, Margaret.	Part Lot 25, Con. IX, Township Flos, County Simcoe.	A-2264
Nipissing Mining Co., Ltd.	Surface rights only—part of mining claims R.L. 400 and 401, Town of Cobalt, District Temiskaming (L.T.A.).	A-2554
Rogerson, A. E., et al.	Registered Plan 226 (amendment of part of), Township Scugog.	A-2076
Scratch, Sherman.	Part Lot 9, Con. I, Western Division, Township Gosfield South, County Essex.	A-2077
Shaver, Mary, et al.	Part Lots 12 and 13, First Range, Credit Indian Reserve, Village of Port Credit, Township of Toronto, County Peel.	A-2108
Smith, Robert Home.	Lots 10-16, Con. B, and Lots 10-13, Con. C, Township Etobicoke, County York (P. 581).	A-2227
Smith (Home) Co.	See "Home Smith Co."	
Southam, W. J.	Part Lot 15, Con. III, Township Barton, County Wentworth (now in City of Hamilton).	A-2345
St. Catharines Development Co., Ltd.	"Rose Gardens," containing 10 acres, lying between Pleasant Avenue and Carleton Place.	A-2355
Sitzer, Charlie.	Part Lots 16, 17 and 18, Block 9, Registered Plan 24B, Village of Delhi, County Norfolk.	A-2384
Smith, Geo. C. B.	Part Lot 7, Con. III, Township Halkirk, District of Rainy River (L.T.A.).	A-2542
Sinnicks, A. G.	Part Lot 73, Township of Stamford, County Welland.	A-2548
Toronto, City of.	Approval, Variation of Urban Zone (P. 576).	A-2245
Temple, J. A., et al.	Part Broken Lot 25, Con. II, Township Innisfil, County Simcoe.	A-2379
Toronto, City of.	Approval, sections 17, 18 and 19, of General Plan (P. 585).	A-2465
Toronto, City of.	Approval, sections 31, 32, 38, 39, 54, 56, 57, 59, 60, and 69, of General Plan (P. 587).	A-2563
Urban Zone, City of Toronto.	Variation of (P. 576).	A-2245
Urban Zone, City of Toronto.	Sections of General Plan (P. 585).	A-2465
Urban Zone, City of Toronto.	Sections of General Plan (P. 587).	A-2563
Urban Zone, Essex Border Utilities Commission.	Extension of (P. 588).	A-2564
Wigle, Ernest R., et al.	Part Farm Lot 3, Eastern Division, Con. I, Township Gosfield South, County Essex.	A-2090
Williams, R. I., et al.	Part Lots Registered Plan 90, York, Toronto.	A-2196
Westdale Properties, Ltd.	Part Parcels M. 2 R., and Glen Road Crescent, Wood Survey, Plan 652, and part of Gore of Ancaster, now in City of Hamilton.	A-2258
Wrights, Limited.	Part west ½ of Lot 11, Con. II, Township Markham, County York.	A-2370
Winger, W. A., Ltd.	Part Block "H," Plan 81, Village of Crystal Beach, Township Bertie, County Welland.	A-2434
White, Jessie T.	Lots 78, 103, etc., etc., Leonard's Plan, Township Stamford, County Welland.	A-2479
York Mills Estates, Ltd.	Part Block "X," Plan M. 503 (Land Titles Office, Toronto), Township North York.	A-2470
Zone, Urban, City of Toronto.	Variation of (P. 576).	A-2245
Zone, Urban, City of Toronto.	Approval sections 17, 18 and 19 of General Plan (P. 585).	A-2465
Zone, Urban, City of Toronto.	Approval sections 31, 32, 38, 39, 54, 56, 57, 59, 60 and 69 of General Plan (P. 587).	A-2563
Zone, Urban, Essex Border Utilities Commission.	Extension of (P. 588).	A-2564

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Aylmer & Malahide Telephone Co., Ltd., vs. Houghton & Bayham Telephone Co., Ltd.....	Terms and conditions for interchange of service.. A-2050
Aylmer & Malahide Telephone Co., Ltd.; Malahide & Bayham Telephone Association, Ltd.....	Complaint re paralleling of poles and wires..... A-2051
Aylmer & Malahide Telephone Co., Ltd.....	Authority to issue bonds to an amount not exceeding \$20,000.00..... A-2101
Arran Number One Telephone Co., Ltd.....	App. By-laws re control and management of..... A-2103
Arran Number One Telephone Co., Ltd.....	Approval of increased charges for service..... A-2106
Austin, D. S. & A. G. (Murray-Brighton Telephone Co.) et al, vs. Esie Terrill & Son, et al.....	Telephone service..... A-2144
Ardoch Rural, Telephone System.. (See "Myers, J. B.")	
Blanshard, Township of.....	Approval By-law No. 37 (1929), debenture issue re extension of Municipal Telephone System into Townships of Downie, Fullarton and Ellice. . . . A-2116
Brudenell and Lyndock, Municipality of.....	Approval of agreement for interchange of telephone service with the Municipality of Hagarty A-2136
Bell Telephone Co. of Canada, Ltd..	Approval of sale to by R. H. Green of telephone system formerly owned and operated by Zorra Telephone Co., Ltd..... A-2140
Brighton, Municipality of, and Murray-Brighton Telephone Co.....	Service to Samuel Palmer, et al..... A2153
Beeton Telephone Co., Ltd.....	Authority to furnish free service to H. Harman and N. P. McDonald..... A-2250
Bell Telephone Co. of Canada, Ltd..	Approval of sale to by R. H. Green of telephone system formerly owned and operated by Zorra Telephone Co., Ltd..... A-2265
Bruce, Township of.....	Approval of purchase from Bell Telephone Co. of Canada, Ltd., of certain telephone plant and equipment in Townships of Arran and Elderslie A-2314
Bell Telephone Co. of Canada, Ltd..	Approval of purchase from, by Township of Bruce of certain telephone plant and equipment in Townships of Arran and Elderslie..... A-2314
Bethesda Mutual Telephone Co., Ltd.....	Increased charges..... A-2347
Bell Telephone Co. of Canada, Ltd..	Approval of sale to of entire undertaking of Wheatley Telephone Co., Ltd..... A-2396
Bell Telephone Co. of Canada, Ltd..	Approval of sale by of certain plant and equipment in Township of Stephenson to Watt Municipal Telephone System..... A-2423
Blanshard, Township of.....	Extension over period of fifteen years of debentures to meet cost of certain extensions to Blanshard Municipal Telephone System..... A-2444
Beaver Creek Telephone Co., Ltd..	Use of highways to by Townships of Marmorra and Lake..... A-2445
Blanshard, Township of.....	Approval of By-law No. 48 A.D. 1929, debenture issue re extension of Municipal Telephone System into Townships of Fullarton, Downie and Ellice..... A-2485
Burford, Township of.....	Approval of By-law No. 1068—use of highways to Southern Ontario Telephone Co., Ltd..... A-2505 (v)
Brougham, Township of.....	Approval of By-law No. 745, use of highways to Department of Lands and Forests of Ontario.. A-2507
Blanshard, Municipality of.....	Approval of agreement for interchange of telephone service with Missouri Telephone Co., Ltd. A-2527
Bell Telephone Co. of Canada, Ltd..	Approval of sale to of entire undertaking of The Chapleau Automatic Telephone Co., Ltd..... A-2568
Brooke, Township of.....	Approval of By-law No. 30 (1929), debenture issue re cost of construction of certain extensions to Brooke Municipal Telephone System..... A-2570

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Caradoc-Ekfrid Telephone Co., Ltd.	Complaint of Dr. W. H. Woods re subscribers con- nected at Strathroy and Glencoe—discrimina- tion in charges. A-2160
Caradoc-Ekfrid Telephone Co., Ltd.	Increased charges. A-2182
Conn Telephone Co., Ltd.	Investment of \$800.00 of Depreciation Fund in Dominion of Canada Bonds (1934). A-2243
Capreol Telephone Co., Ltd.	Use of highways in unorganized Township of Norman. A-2315
Capreol Telephone Co., Ltd.	Use of highways in Township of Hanmer (By-law No. 153) A-2316
Cold Spring Rural Telephone Co., Ltd.	Authority to issue notes not exceeding \$10,000.00, for metallic circuiting of lines. A-2324
Cole & Lobb.	See "Marysburg Telephone Co." Sale of to Messrs. Johnston and Reid. A-2344
Cable, Jno. G., et al, vs. Peoples' Telephone Co. of Forest, Ltd.	Terms and conditions for service, etc. A-2460
Clarendon and Miller, Townships of.	Use of highways to Department of Lands and Forests of Ontario (Approval of By-law No. 262) A-2469
Calabogie & Renfrew Telephone System.	See O'Brien, M. J. A-2474
Cayuga, Village of.	Approval, By-law No. 405, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(h)
Caister, Township of.	Approval, By-law No. 494, use of highways to Southern Ontario Telephone Co., Ltd. A2505 (m)
Charlotteville, Township of.	Approval, By-law No. 436, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(p)
Cochrane, Town of.	Approval of debenture By-law No. 379, improve- ments to its Municipal Telephone System. A-2545
Chapleau Automatic Telephone Co., Ltd.	Approval of sale of entire undertaking to The Bell Telephone Co. of Canada, Ltd. A-2568
Dysart Municipal Telephone System.	Agreement for interchange of service, etc., with Glamorgan Municipal Telephone System. A-2139
Dunnville Consolidated Telephone Co., Ltd.	Investment of portion of Depreciation Fund in C.N. Ry. bonds. A-2409
Denbigh, Abinger and Ashby, Town- ships of.	Use of highways in Townships of Denbigh, Abinger and Ashby to Department of Lands and Forests of Ontario. A-2439
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Delhi, Village of.	Approval of By-law No. 264, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(w)
Dysart, United Townships of, et al.	Approval of Debenture By-law No. 823, extension of Dysart Municipal Telephone System to premises of certain persons not assessed land owners. A-2526
Dysart Municipal Telephone System.	Approval of Debenture By-law No. 823 of the United Townships of Dysart, extension to premises of certain persons not assessed land owners of. A-2526
Emo, Municipality of.	Authority to pass by-law for installation of new switchboard and debenture issue therefor. A-2048
Erie Telephone Co., Ltd.	Approval of agreement for interchange of service with The South Norfolk Telephone Co., Ltd., and The Norfolk County Telephone Co., Ltd. . A-2150
Erie Telephone Co., Ltd.	Approval of agreement for interchange of service with the Norfolk County Telephone Co., Ltd. . A-2149

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East Middlesex Telephone Co., Ltd..	Approval, rules and regulations governing operation of its system.....	A-2386
Erie Municipal Telephone System...	Approval of By-law No. 1280 of County of Wellington, granting use of certain highways to....	A-2518
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Farmers' Telephone Co. of Durham, Ltd.....	Approval of Township of Normanby, By-law No. 12 (1928), use of certain highways to.....	A-2102
Fenella Rural Telephone Co., Ltd.....	Approval of increased charges.....	A-2223
Faraday, Township of.....	Approval of Debenture By-law No. 148, replacements, reconstruction, etc., of Municipal Telephone System.....	A-2340
Flake, John D.....	Approval of By-law No. 126 of Township of Griffith and Matawatchesan, use of highways to.....	A-2392
Green, R. H.....	Approval of sale to, of entire undertaking of Zorra Telephone Co., Ltd.....	A-2121
Green, R. H.....	Approval of sale to Bell Telephone Co., of Canada Ltd., of system formerly owned and operated by Zorra Telephone Co., Ltd.....	A-2140
Green, R. H.....	Approval of sale to of entire undertaking of Zorra Telephone Co., Ltd.....	A-2263
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Griffith and Matawatchesan, Townships of.....	Approval of By-law No. 126, use of highways to John D. Flake.....	A-2392
Gratton, Township of.....	Approval of By-law No. 460, use of highways to Department of Lands and Forests of Ontario..	A-2517
Griffith and Matawatchesan, Townships of.....	Approval of By-law No. 204, use of certain highways to Department of Lands and Forests of Ontario.....	A-2546
Gibson, William Albert, et al.....	Approval of sale to Bertram Thompson of all issued shares of The Pefferlaw Telephone System, Ltd.	A-2593
Houghton & Bayham Telephone Co., Ltd., vs. Aylmer & Malahide Telephone Co., Ltd.....	Terms and conditions for interchange of service..	A-2050
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Jarvis, Village of.....	Approval of By-law No. 69, use of highways to Southern Ontario Telephone Co., Ltd.....	A-2505
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Langton & Walsingham Telephone Co., Ltd., vs. South Walsingham Telephone Co., Ltd.....	Terms and conditions for interchange of service..	A-2212
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Lands and Forests of Ontario, Department of.....	Approval of By-law No. 745 of Township of Brougham, use of highways to.....	A-2507
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Murray-Brighton Telephone Co., Ltd. (D. S. and A. G. Austin), et al, vs. Eslie Terrill & Son, et al.....	Telephone service.....	A-2144
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Murray-Brighton Telephone Co. and Brighton Municipal Telephone System.....	Service to Samuel Palmer, et al.....	A-2153
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Myers, J. B.....	Approval of increased charges for service of Ardoch Rural Telephone System.....	A-2401
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Minto Rural Telephone Co., Ltd.	Approval of By-law No. 1284 of County of Wellington, use of certain highways to A-2532
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McMillan Gold Mines, Ltd.	Erection of poles and wires on certain highways in unorganized Township of Mongowin, District of Sudbury. A-2192
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North Cayuga, Township of	Approval of By-law No. 546, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(d)
North Walsingham, Township of	Approval of By-law No. 329, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(t)
Northern Telephone Co., Ltd.	Authority to furnish free service to Company's representative at Timmins and Manager of switchboard maintenance at New Liskeard. A-2560
Norfolk County Telephone Co., Ltd.	Authority to increase charges for common battery service to subscribers connecting upon lines terminating at Simcoe. A-2580
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Oakland, Township of	Approval of By-law No. 433, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(n)
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Parkhill-Arkona Telephones, Ltd., vs. Florence Macpherson, et al.....	Terms and conditions of service, etc.....
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Port Rowan, Village of.....	Approval of By-law No. 302, use of highways to Southern Ontario Telephone Co., Ltd.....
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	A-2505(e)
South Walsingham, Township of....	Approval of By-law No. 507, use of highways to Southern Ontario Telephone Co., Ltd.....
	A-2505(u)
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 69, Village of Jarvis, use of highways to.....
	A-2505
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 362, Village of Hagers- ville, use of highways to.....
	A-2505(a)
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 315, Township of Seneca, use of highways to.....
	A-2505(b)
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 310, Village of Port Dover, use of highways to.....
	A-2505(c)
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 546, Township of North Cayuga, use of highways to.....
	A-2505(d)
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 496, Township of South Cayuga, use of highways to.....
	A-2505(e)
Southern Ontario Telephone Co., Ltd.....	Approval of By-law No. 262, Township of Oneida, use of highways to.....
	A-2505(f)

LIST OF APPLICATIONS IN RESPECT OF TELEPHONES DURING 1929

—CONTINUED

	Procedure File
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 929, Township of Wal- pole, use of highways to. A-2505(g)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 405, Village of Cayuga, use of highways to. A-2505(h)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 598, Township of Rain- ham, use of highways to. A-2505(i)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 548, Township of Wind- ham, use of highways to. A-2505(j)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 442, Township of Middle- ton, use of highways to. A-2505(k)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 442, Township of Town- send, use of highways to. A-2505(l)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 494, Township of Caister, use of highways to. A-2505(m)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 433, Township of Oakland, use of highways to. A-2505(n)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 367, Township of Wood- house, use of highways to. A-2505(o)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 436, Township of Char- lotteville, use of highways to. A-2505(p)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 509, Township of Hough- ton, use of highways to. A-2505(q)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 302, Village of Port Rowan, use of highways to. A-2505(r)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 304, Village of Waterford, use of highways to. A-2505(s)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 329, Township of North Walsingham, use of highways to. A-2505(t)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 507, Township of South Walsingham, use of highways to. A-2505(u)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 1068, Township of Bur- ford, use of highways to. A-2505(v)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 264, Village of Delhi, use of highways to. A-2505(w)
Southern Ontario Telephone Co., Ltd.	Approval of By-law No. 753, Township of South Norwich, use of highways to. A-2505(x)
South Norwich, Township of.	Approval of By-law No. 753, use of highways to the Southern Ontario Telephone Co., Ltd. A-2505(x)
Thessalon, Township of.	Extension of Municipal Telephone System into unorganized Townships of Kirkwood, Bridge- land, Wells and Gould. A-2115
Terrill, Eslie & Son, et al, vs. D. S. and A. G. Austin (Murray Brigh- ton Telephone Co.).....	Telephone service. A-2144
Tuckersmith Municipal Telephone System.	Increased charges. A-2211
Tuckersmith, Township of.	Approval of By-law No. 124, debenture issue re certain extensions to its Municipal Telephone System. A-2327

LIST OF APPLICATIONS IN RESPECT OF TELEPHONES DURING 1929

—CONTINUED

	Procedure File
Tiny Municipal Telephone System	Approval, By-law No. 718, issue of debentures to meet cost of establishment of system. A-2412
Telephone Systems	Form of Financial Statement to be furnished to subscribers. A-2482
Townsend, Township of	Approval of By-law No. 442, use of highways to Southern Ontario Telephone Co., Ltd. A-2050(1)
Thompson, Bertram	Approval of sale to, by W. A. Gibson, et al, of all issued shares of Pefferlaw Telephone System, Ltd. A-2593
Wellesley Municipal Telephone System	Approval of By-law No. 1 re service to non-subscribers. A-2111
Welland County Telephone Co., Ltd.	Authority to use portion of reserve Depreciation Fund in reduction of bonded indebtedness. A-2133
Woods, Dr. W. H.	Complaint re Caradoc-Ekfrid Telephone Co., Ltd., discrimination in favour of subscribers connected at Strathroy and Glencoe. A-2160
Welland County Telephone Co., Ltd.	Issue of additional capital stock (not exceeding \$123,755.00) for new construction and additions A-2241
Wellington, County of	Approval of By-law No. 1277, use of highways to The Erin Municipal Telephone System A-2346
Wheatley, Telephone Co., Ltd.	Approval of sale of undertaking to Bell Telephone Co. of Canada, Ltd. A-2396
Watt Municipal Telephone System	Approval of sale to, by Bell Telephone Co. of Canada, Ltd., of certain plant and equipment in Township of Stephenson. A-2423
Watt Municipal Telephone System	Extension of, into Township of Stephenson (By-law No. 615 of Township of Watt). A-2472
Watt, Township of	Extension of Watt Municipal Telephone System into Township of Stephenson (By-law No. 615, Township of Watt). A-2472
Walpole, Township of	Approval of By-law No. 929, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(g)
Windham, Township of	Approval of By-law No. 548, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(j)
Woodhouse, Township of	Approval of By-law No. 367, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(o)
Waterford, Village of	Approval of By-law No. 304, use of highways to Southern Ontario Telephone Co., Ltd. A-2505(s)
Wellington, County of	Approval of By-law No. 1280, use of certain highways to Erin Municipal Telephone System. A-2518
Wellington, County of	Approval of By-law No. 1284, use of certain highways to Minto Rural Telephone Co., Ltd. A-2532
Zorra Telephone Co., Ltd.	Approval of sale of entire undertaking to R. H. Green. A-2121
Zorra Telephone Co., Ltd.	Approval of sale by R. H. Green to Bell Telephone Co. of Canada, Ltd., of system formerly operated by Zorra Telephone Co., Ltd. A-2140
Zorra Telephone Co., Ltd.	Approval of sale of entire undertaking to R. H. Green. A-2263
Zorra Telephone Co., Ltd.	Approval of sale by R. H. Green to Bell Telephone Co. of Canada, Ltd., of system formerly operated by Zorra Telephone Co., Ltd. A-2265

LIST OF BELL TELEPHONE AGREEMENTS APPROVED BY THE BOARD UNDER
SECTION 97 OF "THE TELEPHONE ACT"

EXCHANGE AND TOLL LINE AGREEMENTS

	Procedure File
Beckwith & Montague Rural Telephone Co., Ltd.	A-2179
Bruce Municipal Telephone System.	A-2251
Burwash Telephone Line (See "Ontario, Province of").	
Enterprise Telephone System, Ltd.	A-2428
Glengarry Telephone Co., Ltd.	A-2184
Hazeldean Rural Telephone Co., Ltd.	A-2317
International Nickel Co. of Canada, Ltd. (Garson Mine).	A-2553
Leeds & Grenville Independent Telephone Co., Ltd.	A-2161
Lands and Forests of Ontario, at Eau Claire (in lieu of Exchange and Toll Line).	A-2473
Metcalfe Rural Telephone Co., Ltd.	A-2178
Marysburg Telephone Company.	A-2410
Moscow Rural Telephone Association.	A-2427
Monck Rural Telephone Co., Ltd.	A-2471
McNab Telephone Co., Ltd.	A-2183
Ontario, Province of (Provincial Secretary's Department operating the Burwash Line)	A-2388
Prescott Rural Telephone Co., Ltd.	A-2191
Russell Rural Telephone Co., Ltd.	A-2322
Redden Telephone Co., Ltd.	A-2426
South Monaghan Municipal Telephone System.	A-2117
Verona & Frontenac Telephone Co., Ltd.	A-2436
Watt Municipal Telephone System.	A-2348
Yarker Telephone Co.	A-2435

SERVICE STATION AGREEMENTS

Drummond & Elmsley Telephone Co., Ltd.	A-2259
Finnie, Leslie I. (Arnprior).	A-2298
Fretts & Brisco Telephone Co., Ltd.	A-2362
Farmers' Telephone Co. of Durham, Ltd.	A-2437
Gore "G" Telephone Co., Ltd.	A-2083
Glengarry Telephone Co., Ltd.	A-2260
Henderson (Dr.) Telephone Co., Ltd.	A-2093
International Nickel Co. of Canada, Ltd. (Garson Mine).	A-2549
Plane Settlement Telephone Co., Ltd.	A-2054
Superior Telephone Club.	A-2408
Superior Telephone Club (Revised).	A-2463
Tilbury East Municipal Telephone System.	A-2534
Wolfstown Telephone Co., Ltd.	A-2177

TARIFF OF FEES

TARIFF OF FEES PAYABLE IN CASH OR LAW STAMPS UNDER SECTIONS 61 AND 62 OF
"THE RAILWAY AND MUNICIPAL BOARD ACT"

For copy of any Document, 10 cents for each 100 words and 50 cents for each Certificate.

For copy of any map or plan, applicants are to pay draughtsmen's and engineer's fees for same and 50 cents for each Certificate.

In contentious matters, including arbitrations or references to the Board under Public General Acts of Ontario, requiring a Hearing, there shall be paid in Law Stamps the sum of \$15.00 for each day or fraction thereof over one half-day, and the sum of \$10.00 for each half-day or less occupied by or in connection with the Hearing, and \$1.00 on each original subpoena.

In all other arbitrations or references requiring a Hearing there shall be paid in Law Stamps the sum of \$50.00 for each day or fraction thereof over one half-day, and the sum of \$25.00 for each half-day or less occupied by or in connection with the Hearing, and \$1.00 on each original subpoena.

IN CASES IN WHICH THERE IS NO OPPOSING PARTY

ON ORDER under Section 304 of "The Municipal Act," validating a By-law and Debentures, the following sums shall be paid in Law Stamps:

(These fees shall be payable on each group of four By-laws (grouped by serial numbers) consolidated under "The Local Improvement Act.")

Where the issue of Debentures amounts to \$10,000 or less.....	\$15 00
Over \$10,000 and up to \$15,000.....	20 00
“ 15,000 “ 20,000.....	25 00
“ 20,000 “ 25,000.....	30 00
“ 25,000 “ 30,000.....	35 00
“ 30,000 “ 40,000.....	40 00
“ 40,000 “ 50,000.....	45 00
“ 50,000 “ 60,000.....	50 00
“ 60,000 “ 70,000.....	55 00
“ 70,000 “ 80,000.....	60 00
“ 80,000 “ 90,000.....	65 00
“ 90,000 “ 100,000.....	70 00
“ 100,000 “ 110,000.....	75 00
“ 110,000 “ 120,000.....	80 00
“ 120,000 “ 130,000.....	85 00
“ 130,000 “ 140,000.....	90 00
“ 140,000 “ 150,000.....	95 00
“ 150,000 “ 160,000.....	100 00
“ 160,000 “ 170,000.....	105 00
“ 170,000 “ 180,000.....	110 00
“ 180,000 “ 190,000.....	115 00
“ 190,000 “ 200,000.....	120 00
“ 200,000, such sum as the Board may order or direct.	

The following sums shall be paid in Law Stamps on the following Orders and Certificates:

Approval of By-law for work ordered by Dominion or Ontario Railway Board—Section 297 (2) (f) of "The Municipal Act".....	\$10 00
Approval of By-law for extension of Waterworks or Electric Light or Gasworks, etc.—Section 399 (2) of "The Municipal Act".....	10 00
Approval of a plan under "The Railway Act".....	5 00
Approval of Railway Fenders.....	5 00
Extension of time to pass a By-law—Section 288 (5) of "The Municipal Act".....	5 00
Extension of Debenture Issue period—Section 296 (11) and (12) of "The Municipal Act".....	5 00
Approval of Bridge Construction By-law—Section 297 (2) (e) of "The Municipal Act".....	5 00
Approval of By-law changing the rate of interest on debentures—Section 300 of "The Municipal Act".....	5 00
Repeal of By-law as to amount not required—Section 301 (2) of "The Municipal Act".....	5 00
Approval of further debt and levies where tax rate too high—Section 306 (2) of "The Municipal Act".....	5 00
Approval of Sinking Fund Investment By-law—Section 317 of "The Municipal Act".....	5 00
Approval of Municipal Fuel By-law—Section 397 (38) of "The Municipal Act".....	5 00
Approval of laying out of highway less than 66 feet in width—Section 490 of "The Municipal Act".....	5 00
Approval of By-law abandoning part of local improvement work—Section 18 of "The Local Improvement Act".....	5 00
Approval of plan of land subdivision.....	5 00
Approval of Railway Company's Public By-laws and Rules.....	2 00
Approval of Railway Company's Tolls and Tariffs.....	2 00
Approval of Railway Company's Examiner of Motormen.....	1 00

On Orders not included in the above list, such sums as the Board may order or direct.

TARIFF OF FEES—CONTINUED

TARIFF OF FEES PAYABLE IN LAW STAMPS IN PROCEEDINGS UNDER "THE TELEPHONE ACT"

ON ORDER:

Authorizing the passing of a By-law extending the period for repayment of debentures to cover the cost of telephone system established pursuant to Section 19, beyond 10 years; under Section 26.	\$10 00
Authorizing the extension of a telephone system established pursuant to Section 19, into unorganized townships; under Section 18.	5 00
Approving a Municipal By-law providing for the establishment or extension of telephone system; under Section 19.	5 00
Extending the period within which debenture By-law to cover cost of establishing a telephone system pursuant to Section 19 may be passed; under Section 25.	5 00
Authorizing a Municipal Council to pass a By-law for reconstruction, etc.; under Section 27.	5 00
Authorizing a Municipal Council to pass a By-law for the issue of debentures for furnishing service to persons not being assessed land owners; under Section 28.	5 00
Authorizing the passing of a By-law providing for the issue of new debentures to provide for the payment of a portion of the principal of the original debentures falling due in any year; under Section 30.	5 00
Approving the purchase of telephone systems; under Sections 31 and 102.	5 00
Approving Connecting Agreement with The Bell Telephone Company of Canada, Ltd.; under Section 97.	5 00
Authorizing a Company to expand a portion of its Depreciation Reserve in new construction, etc.; under Section 110.	5 00
Authorizing a Company to issue additional stock or bonds; under Section 111.	5 00
Authorizing the removal of signatures from a petition praying for the establishment of a telephone system pursuant to Section 19; under Section 12.	2 00
Granting the use of highways in unorganized townships; under Section 84.	2 00
Approving the By-laws of a telephone company; under Section 88.	2 00
Approving Connecting Agreement between telephone systems within the jurisdiction of Ontario; under Section 97.	2 00
Approving regulations to prevent the misuse of system by subscribers; under Section 112	2 00
Approving Municipal By-law granting the use of highways; under Section 80.	1 00

On any Order not included in the above list, such sums as the Board may order or direct.

In contentious matters requiring a Hearing, \$15.00 for each day or fraction thereof over one half-day, and \$10.00 for each half-day or less occupied in connection with the Hearing, and \$1.00 on each original subpoena.

Where inquiry is made by the Board's expert, \$10.00 for each day or fraction thereof over one-half day, and \$5.00 for each half-day or less occupied in connection with such inquiry.

For copy of any Document, 10 cents for each 100 words, and 50 cents for each Certificate.

THE FOLLOWING GIVES A BRIEF SUMMARY OF THE EXTENSIONS AND IMPROVEMENTS MADE TO THE RAILWAYS UNDER PROVINCIAL JURISDICTION DURING THE YEAR 1929

BUFFALO & FORT ERIE FERRY AND RAILWAY COMPANY

It is reported by this company that during the year December 31st, 1928, to December 31st, 1929, they did not make any extensions to track.

It is also reported that during the same period they did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc.

CORNWALL STREET RAILWAY, LIGHT & POWER COMPANY, LIMITED

This company reports that during the year ending December 31st, 1929, the railway was extended approximately half a mile at a cost of \$10,654.94.

They report during the same period a total expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc., of \$31,734.44.

FORT WILLIAM ELECTRIC RAILWAY

It is reported by this railway that during the year December 31st, 1928, to December 31st, 1929, they did not make any extensions to track.

It is also reported that during the same period a total expenditure was made on track improvements, overhead structure, rolling stock, buildings, machinery, etc., of \$44,990.58.

GUELPH RADIAL RAILWAY

The Hydro-Electric Power Commission of Ontario reports that during the year ending December 31st, 1929, there was no extension made to the tracks of this railway.

They report, however, an expenditure during the same period on track improvements, overhead structure, rolling stock, buildings, machinery, etc., of \$7,761.78.

THE HAMILTON STREET RAILWAY COMPANY

It is reported that this railway during the year ending December 31st, 1929, was extended 750 feet at a cost of \$13,075.39.

They also report that during the same period a total expenditure was made on track improvements, overhead structure, rolling stock, buildings, machinery, etc., of \$264,269.84.

THE HAMILTON & DUNDAS STREET RAILWAY COMPANY

During the year ending 31st December, 1929, there were no extensions made to track and no expenditure on track improvements, rolling stock, etc., for the reason that this railway is not now being operated.

THE HAMILTON, GRIMSBY AND BEAMSVILLE ELECTRIC RAILWAY COMPANY

It is reported that during the year ending 31st December, 1929, there were no extensions made to track.

It is also reported that during the same period this company did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc.

THE HAMILTON AND BARTON INCLINE RAILWAY COMPANY

During the year December 31st, 1928, to December 31st, 1929, it is reported that the company did not make any extensions to track.

They also report that during the same period they did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc.

THE HUNTSVILLE AND LAKE OF BAYS RAILWAY COMPANY

This company reports that during the year ending December 31st, 1929, they did not make any extensions to track.

They report, however, a total expenditure during the same period on track improvements overhead structure, rolling stock, buildings, etc., of \$900.78.

HYDRO-ELECTRIC RADIAL RAILWAY (ESSEX DIVISION)
(Sandwich, Windsor and Amherstburg Railway)

It is reported by the Hydro-Electric Power Commission of Ontario that during the year ending December 31st, 1929, there were no extensions made to the tracks of this railway.

They report, however, a total expenditure during the same period on track improvements, overhead structure, rolling stock, buildings, etc., of \$123,180.70.

THE INTERNATIONAL RAILWAY COMPANY (NIAGARA FALLS PARK AND RIVER DIVISION)

During the year ending December 31st, 1929, it is reported by this company that they did not make any extensions to track.

They report, however, during the same period an expenditure on track improvements, overhead structure, rolling stock, buildings, etc., of \$4,115.21.

THE INTERNATIONAL TRANSIT COMPANY

This company report that during the year ending December 31st, 1929, they did not make any track extensions.

They report, however, a total expenditure during the same period on track improvements, overhead structure, rolling stock, buildings, etc., of \$797.14.

KINGSTON, PORTSMOUTH AND CATARAQUI ELECTRIC RAILWAY COMPANY

During the year ending December 31st, 1929, it is reported by this company that they did not make any extensions to track.

They also report that during the same period the only expenditure on track improvements, rolling stock, buildings, machinery, etc., was on repairs.

KITCHENER-WATERLOO STREET RAILWAY

This company reports that during the year ending December 31st, 1929, no extensions were made to track.

They, however, report a total expenditure during the same period on track improvements, overhead structure, rolling stock, buildings, etc., of \$1,943.77.

LAKE HURON AND NORTHERN ONTARIO RAILWAY

During the year ending December 31st, 1929, this company did not make any extensions to track.

They did not make any expenditure on track improvements, overhead structure, rolling stock, etc.

This railway is not being operated at the present time.

LONDON STREET RAILWAY COMPANY

During the year ending December 31st, 1929, it is reported by this company that they did not make any extensions to track.

They, however, report a total expenditure during the same period on track improvements, overhead structure, rolling stock, machinery, etc., of \$52,847.88.

THE MIDLAND-SIMCOE RAILWAY COMPANY

During the year December 31st, 1928, to December 31st, 1929, it is reported that no extensions were made to track.

It is also reported that during the same period they made a total, expenditure on track improvements, overhead structure, rolling stock, etc., of \$11,000.00.

MOUNT MCKAY AND KAKABEKA FALLS RAILWAY COMPANY

It is reported that this company during the year ending December 31st, 1929, did not make any extensions to track.

During the same period it is also reported that they did not make any expenditure on track improvements, rolling stock, buildings, machinery, etc.

This road is leased and operated by the City of Fort William.

NIAGARA PENINSULAR RAILWAY

During the year ending December 31st, 1929, this company did not make any extensions to track.

It is also reported that during the same period they did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, etc.

THE PETERBOROUGH RADIAL RAILWAY

The Hydro-Electric Power Commission of Ontario reports that the above railway is not now in use, operations having been discontinued on the 1st of April, 1927.

PORT ARTHUR CIVIC RAILWAY

During the year ending December 31st, 1929, it is reported that no extensions were made to the track of this railway.

It is also reported that during the same period no expenditure was made on track improvements, overhead structure, rolling stock, buildings, etc.

SARNIA STREET RAILWAY COMPANY, LIMITED

It is reported that during the year December 31st, 1928, to December 31st, 1929, this company did not make any track extensions.

They report during the same period, however, a total expenditure on track improvements, overhead structure, rolling stock, machinery, etc., of \$9,056.97.

SUDBURY-COPPER CLIFF SUBURBAN ELECTRIC RAILWAY

It is reported that during the year December 31st, 1928, to December 31st, 1929, this company did not make any track extensions.

It is also reported that during the same period they did not make expenditure on track improvements, overhead structure, rolling stock, etc., except new wire—\$3,828.18, new generator, \$5,811.49, and five new cars, \$17,589.47. Total, \$27,229.14.

TEMISKAMING & NORTHERN ONTARIO RAILWAY

During the year December 31st, 1928, to December 31st, 1929, it is reported by the Temiskaming and Northern Ontario Railway Commission that they extended the tracks of the above railway at a cost of \$113,401.16.

They also report a total expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc., of \$108,283.55.

THURLOW RAILWAY COMPANY

It is reported that during the year ending December 31st, 1929, this company did not make any extensions to track.

They also report during the same period no expenditure upon track improvements, overhead structure, rolling stock, buildings, machinery, etc.

TILLSON SPUR LINE RAILWAY COMPANY

It is reported that during the year ending 31st December, 1929, there were no extensions made to track.

It is also reported that during the same period they did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc.

THE TORONTO TRANSPORTATION COMMISSION

It is reported by this Commission that during the year ending December 31st, 1929, they made extensions to track of .650 miles at a cost of \$156,314.96.

It is also reported that during the same period they made a total expenditure on track improvements, overhead structure, rolling stock, buildings, etc., of \$788,023.25.

TORONTO RADIAL RAILWAYS

It is reported by the Toronto Transportation Commission, now operating the above railways, that during the year ending December 31st, 1929, no extensions were made to track.

It is also reported that during the same period a total expenditure was made on track improvements, overhead structure, rolling stock, buildings, machinery, etc., of \$642.10.

THE TOWNSHIP OF YORK AND WESTON RAILWAYS

It is reported by the Toronto Transportation Commission, now operating the above railways, that during the year ending 31st December, 1929, they did not make any extensions to track.

It is also reported that during the same period they did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc.

THE WENTWORTH INCLINE RAILWAY, LIMITED

It is reported by this company that they did not make any extensions to track during the year ending December 31st, 1929.

They also report that during the same period they did not make any expenditure on track improvements, overhead structure, rolling stock, buildings, machinery, etc.

ELECTRIC, STEAM AND INCLINE RAILWAYS UNDER PROVINCIAL JURISDICTION, YEAR ENDING 31st DECEMBER, 1929

No.	Name of Railway	Length of road first main track	Length of road second main track	Total main track	Length of sidings and turnouts	Total computed as single track	Length under construction	No. Power Houses		Remarks
								Steam	Water	
*1	Buffalo & Fort Erie Ferry & Railway Company.....	miles 2.71	miles	miles 2.71	miles .89	miles 3.60	miles .....	.....	.....	Power purchased from St. Lawrence Power Co.
2	Cornwall Street Railway, Light and Power Company, Ltd.....	4. 4.935	.....	4. 24.630	2. .866	6. 25.496	.....	1	.....	Power purchased from Hydro-Electric Power Commission, Fort William.
†4	Guelph Radial.....	8.49	.....	8.49	1.56	10.05	.....	.....	.....	Power purchased from Light and Heat Commissioners, Guelph.
5	Hamilton Street.....	18.	16.3	34.3	.....	34.3	.....	.....	.....	Power purchased from Hamilton Cataract Power, Light & Traction Co., Ltd.
6	Hamilton and Dundas.....	5.85	.20	6.05	1.60	7.65	.....	.....	.....	Not in operation at present.
7	Hamilton, Grimsby & Beamsville Electric.....	22.6	.....	22.6	3.6	26.2	.....	.....	.....	Power purchased from Hamilton Cataract Power, Light & Traction Co., Ltd.
*8	Hamilton & Barton (Incline).	.12	.12	.24	.....	.24	.....	1	.....	At head of Incline.
*9	Huntsville and Lake of Bays.	1.45	.....	1.45	.31	1.76	.....	.....	.....	Power purchased from Hydro-Electric Power Commission of Ontario.
†10	Hydro-Electric Radials (Essex Division) S.W. & A. Ry. ...	43.933	12.542	56.475	3.977	60.452	.....	.....	.....	Power purchased from the Great Lakes Power Co., Ltd.
11	International Rly. (Niagara Falls Park & River Division)	11.649	11.069	22.718	1.314	24.032	.....	1	.....	Power purchased from the Great Lakes Power Co., Ltd.
12	International Transit.....	3.80	1.17	4.97	.09	5.06	.....	.....	.....	Power purchased from City of Kingston.
13	Kingston, Portsmouth & Cataraqui Electric.....	6.	2.	8.	.....	8.	.....	.....	.....	Power purchased from Hydro-Electric Power Commission of Ontario.
14	Kitchener-Waterloo Street Ry.	6.55	2.86	9.41	.84	10.25	.....	.....	.....	Power purchased from Hydro-Electric Power Commission of Ontario.

ELECTRIC, STEAM AND INCLINE RAILWAYS UNDER PROVINCIAL JURISDICTION, YEAR ENDING 31st DECEMBER, 1929

No.	Name of Railway	Length of road first main track	Length of road second main track	Total main track	Length of sidings and turnouts	Total computed as single track	Length under construction	No. Power Houses		Remarks
								Steam	Water	
*15	Lake Huron and Northern Ontario Railway.....	16.		16.	1.	17.	miles			Not in operation at present.
16	London Street Railway.....	26.73	7.64	34.37	.98	35.35				Power purchased from the Public Utilities Commission, London.
*17	Midland Simcoe Railway Co..	1.		1.	4.	5.				
18	Mount McKay and Kakabeka Falls.....	5.		5.	1.50	6.50				Leased to and operated by City of Fort William.
*19	Niagara Peninsular.....	3.325		3.325	2.115	5.440				
20	Peterborough Radial Ry.....									Operation discontinued April 1st, 1927.
21	Port Arthur Municipal Ry....	13.43	6.10	19.53	1.04	20.57				Power purchased from Hydro-Electric Power Commission of Ontario
22	Sarnia Street Ry. Co., Ltd....	4.50	4.50	9.	.25	9.25				One Hydro-Electric Power House, Power purchased from Hydro-Electric Power System of Sarnia.
23	Sudbury-Copper Cliff Suburban Electric.....	7.9		7.9	.03	8.2		1		Power purchased from Wahnapitae Power Company.
*24	Temiskaming & Northern Ontario Railway.....	388.50	1.70	390.20	131.15	521.35	54.7	1		At North Bay. Power purchased from Hydro-Electric Power Commission of Ontario, Northern Ontario Power Co., Ltd., and Public Utilities Commission, Town of Cochrane.

See Notes

*25	Thurlow Railway.....	2.671	.....	2.671	4.666	7.337	.....	.....	.....	Operated by C.N.R.
26	Tilson Spur Line Railway Co.	1.010	.....	.....	.051	1.061	.....	.....	.....	Power purchased from the Toronto Hydro-Electric System.
27	Toronto Transportation Commission.....	120.958	101.452	222.410	32.411	254.821	.....	.....	.....	Power purchased from Hydro-Electric Power Commission of Ontario.
†28	Toronto Radial Railways.....	48.768	.685	49.453	11.091	60.544	.....	.....	.....	Power purchased from the Toronto Transportation Commission.
†29	Towaship of York and Weston Railways.....	7.052	5.978	13.030	.144	13.174	.....	.....	.....	Power purchased from Hamilton Hydro-Electric System. One electric power house, Mountain Top, Hamilton.
#30	Wentworth Incline Ry., Ltd.....	.14	.14	.28	.....	.28	.....	.....	.....
	Total.....	787.071	194.151	980.212	207.475	1,188.967	54.7	2	3	

*Steam railways.

†Formerly Hamilton Mountain Park Company, Ltd.

†Operated by Hydro-Electric Power Commission of Ontario.

†Operated by The Toronto Transportation Commission, the Toronto and York Radial Railways having been taken over on January 12th, 1927.

TORONTO, 1929

Summary by months of all accidents on lines of the Toronto Transportation Commission from January 1st to December 31st, 1929

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Collisions with cars.....	6	2	Nil	3	1	2	9	1	1	1	2	4	32
Collisions with autos.....	472	426	367	343	315	297	364	360	391	378	393	937	5,043
Collisions with motorcycles and bicycles.....	4	4	5	2	11	11	10	6	6	6	2	3	70
Collisions with wagons.....	9	3	11	5	6	7	17	7	13	7	12	16	113
Boarding cars.....	10	12	12	4	9	9	11	7	18	7	13	11	123
Alighting from cars.....	8	10	16	18	18	9	20	20	21	19	15	13	187
Falling within cars.....	38	64	22	20	21	14	28	20	29	38	29	74	397
Derailment of cars.....	Nil	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil	1	Nil	1	3
Miscellaneous.....	50	44	24	46	28	57	62	35	43	35	31	57	512
Total, all accidents.....	597	565	457	441	409	406	522	456	522	492	497	1,116	6,480
Personal injuries, all degrees:													
To passengers.....	71	71	52	62	49	57	94	44	83	65	75	176	899
To others.....	21	16	7	20	16	23	15	9	9	9	8	11	164
Total.....	92	87	59	82	65	80	109	53	92	74	83	187	1,063
Fatal accidents:													
To passengers.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
To others.....	4	3	Nil	2	4	2	5	2	Nil	1	1	Nil	24
Total.....	4	3	Nil	2	4	2	5	2	Nil	1	1	Nil	24

HAMILTON, 1929

Accidents on Hamilton Street Railway and Hamilton, Grimsby and Beamsville Electric Railway Lines

From January 1st to December 31st, 1929

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Collisions with cars.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	2
Collisions with autos.....	53	83	35	61	49	39	58	57	60	72	47	125	739
Collisions with motorcycles and bicycles.....	Nil	Nil	Nil	Nil	Nil	Nil	2	Nil	Nil	Nil	Nil	Nil	2
Collisions with wagons.....	Nil	Nil	Nil	Nil	Nil	2	Nil	Nil	2	Nil	2	1	7
Boarding cars.....	Nil	1	Nil	1	Nil	2	1	Nil	Nil	1	Nil	Nil	6
Alighting from cars.....	2	Nil	2	2	1	1	1	Nil	Nil	Nil	Nil	Nil	9
Derailment of cars.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	1
Miscellaneous.....	Nil	Nil	1	2	1	2	1	Nil	1	Nil	2	1	11
Total, all accidents.....	55	84	38	66	51	46	63	57	63	73	51	130	777
Personal injuries, all degrees:													
To passengers.....	2	1	2	3	1	3	2	Nil	1	Nil	Nil	3	18
To others.....	3	Nil	1	2	1	3	3	1	5	Nil	1	Nil	20
Total.....	5	1	3	5	2	6	5	1	6	Nil	1	3	38
Fatal accidents:													
To passengers.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
To others.....	Nil	Nil	1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	2
Total.....	Nil	Nil	1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	2

INDEX TO RAILWAY LEGISLATION

(List No. 2)

The following index has been made with the object of continuing in chronological order all the legislation passed by the Dominion and Provincial Governments since 1867, affecting railways situated wholly or partially within the Province of Ontario.

"List No. 2" was commenced on page 272 of our Ninth Annual Report (1914), and is continued on page 131 and following pages of our Annual Report for 1924, and on pages 162, 1925; 146, 1926; 178, 1927; 178, 1928, and in the following list up to and inclusive of 1929:

	Chap.	Year
CANADIAN NATIONAL RAILWAYS:		
Dominion Statute.....	10	1929
Act to amend.....		
Dominion Statute.....	11	1929
Act respecting.....		
Dominion Statute.....	12	1929
Act respecting.....		
Dominion Statute.....	21	1929
Act respecting.....		
Dominion Statute.....	22	1929
Act respecting.....		
Dominion Statute.....	33	1929
Act respecting.....		
Ontario Statute.....	128	1929
See Act respecting Township of York.		
CANADIAN PACIFIC RAILWAY COMPANY:		
Dominion Statute.....	65	1929
See Midland-Simcoe Ry. Co., Sec. 4.		
Ontario Statute.....	128	1929
See Act respecting the Township of York.		
CANADIAN TERMINAL SYSTEM, LIMITED:		
Ontario Statute.....	134	1929
DETROIT RIVER TUNNEL COMPANY:		
Ontario Statute.....	126	1929
See Act respecting City of Windsor.		
ESSEX TERMINAL RAILWAY COMPANY:		
Dominion Statute.....	68	1929
Act respecting.....		
HYDRO-ELECTRIC RAILWAY ACT:		
Ontario Statute.....	55	1929
Operation of S.W. & A. Ry.		
LONDON AND PORT STANLEY RAILWAY COMPANY:		
Ontario Statute.....	106	1929
See Act respecting City of London.		
MICHIGAN CENTRAL RAILROAD COMPANY:		
Ontario Statute.....	126	1929
See Act respecting City of Windsor.		
TORONTO RADIAL RAILWAY ACT:		
Ontario Statute.....	23	1929
See Statute Law Amendment Act, Section 20, Hydro-Electric Power Commission.		
TORONTO TRANSPORTATION COMMISSION:		
Ontario Statute.....	124	1929
See Act respecting City of Toronto.		
TORONTO TERMINALS RAILWAY COMPANY:		
Dominion Statute.....	73	1929
Act respecting.....		
WINDSOR, ESSEX & LAKE SHORE RAPID RAILWAY COMPANY:		
Ontario Statute.....	56	1929

FORMS

FORM THAT MAY BE USED IN CONNECTION WITH THE EXAMINATION OF MOTORMEN

Name of City or Town193

NAME OF RAILWAY

This is to certify that, acting under The Railway Act, 1927, R.S.O., Chapter 224, Section 265, I have fully examined the..... who is..... years of age and..... feet..... inches high, weighs..... lbs., complexion....., as to his fitness as a motorman, that the said..... is of steady habits, and is in physical ability, intelligence and general knowledge of, and experience in, this work qualified to act as motorman on any electric motor car of said Company.

I have been duly appointed an examiner under the said Act, my appointment being dated

.....

Name..... Examiner.

FORM TO BE USED BY COMPANIES IN REPORTING ACCIDENTS

ACCIDENTS: Regulations Under and in Pursuance of Sections 275 and 276 of "The Railway Act, 1927." R.S.O., Chapter 224.

ACCIDENTS.—Every company upon the happening of an accident shall give to the Ontario Railway and Municipal Board notice thereof in writing by delivering the same at the office of the Board in the City of Toronto or by mailing it, postage prepaid, in a registered letter addressed to the Board.

Such notice shall contain a statement signed by a duly authorized officer of such company, setting forth the information and particulars hereinafter mentioned.

Such statement shall be divided into paragraphs, each of which shall include and refer to one (or one group) only of the numbered particulars hereinafter mentioned, and the paragraph referring to each respective numbered particular shall bear the number corresponding to the number hereinafter given for each such particular.

The numbers of paragraphs and the particulars to which each shall refer as aforesaid are as follows:

- 1. Name or names of company or companies concerned in accident.
2. Numbers of train, engine, car or motor.
3. Date and time of accident.
4. Nature of accident.
5. Exact location.
6. Name in full, address and legal addition of each person injured or killed.
7. Age.
8. Married or single.
9. Passenger, employee or other.
10. If employee, length and nature of service with dates and periods of different occupations (if more than one).
11. If employee, character, experience, skill and fitness with respect to occupation at time of accident.
12. How engaged at time of accident, and how long on duty.
13. Cause of accident, how same occurred, with full particulars and details, and diagram if required.
14. Persons in charge, with full names, addresses and the particulars referred to in paragraphs 10, 11 and 12.
15. Result to person and particulars of injury.
16. Result to property, including amount of damage.
17. Names and addresses of all persons present at, or eye-witnesses of, the accident.
18. What investigation (if any), and result of same.
19. Verdict (if any).

The Board reserves the right to require such further and other details, particulars, maps, plans, profiles, documents, models and information or illustration of any kind as to the nature of the accident and a full understanding thereof may suggest or require.

In pursuance of Sections 275 and 276 of said Act, the Board declares that all such information so given in pursuance of this regulation shall be privileged.

Signature of Officer.

N.B.—Give name of officer who fills out this report.

REGULATIONS

REGULATION AS TO HEIGHT OF CAR STEPS

Under and in pursuance of a certain order of the Board bearing date the 2nd day of June, A.D. 1909, The Ontario Railway and Municipal Board made the following regulations:

The steps on all cars hereafter constructed and used by The Toronto Railway Company and all other street and electric railways under the jurisdiction of this Board shall have steps conforming to the following regulations:

On closed single truck cars the height of the first step above the ground shall not be less than twelve nor more than fifteen inches.

On closed double truck cars the height of the first step above the ground shall not be less than fourteen nor more than sixteen inches.

On open single truck cars the height of the first step above the ground shall be not less than twelve nor more than fifteen inches, and the distance between the first and second steps and the second step and the floor of the car shall measure twelve inches and nine inches respectively.

On open double truck cars, the height of the first step above the ground shall be not less than fourteen nor more than sixteen inches, and the distance between the first and second steps and the second step and the floor of the car shall measure twelve inches and fourteen inches respectively.

REGULATION RE DRINKING WATER ON PASSENGER CARS

Every Electric Railway Company in Ontario, subject to the jurisdiction of the Board, shall provide in each passenger car which runs 20 miles or more, a suitable receptacle for water with paper cups attached upon or near such receptacle, and shall keep such receptacle, while the car is in use, constantly supplied with cool drinking water for the use of passengers and the conductor and motorman in charge of such car.

This regulation shall not apply to street railways in towns or cities.

(Sgd.) C. R. McKEOWN,
Chairman.

(Sgd.) A. B. INGRAM,
Vice-Chairman.

(Sgd.) J. A. ELLIS,
Commissioner.

Dated at Toronto, this 10th day of April, A.D. 1928.

CANADIAN NATIONAL SAFETY LEAGUE

ONTARIO SAFETY LEAGUE
1929

The Ontario Railway and Municipal Board is of the opinion that it should give its share of publicity in its Annual Report to some of the work done by these two Safety Leagues, as their success in preventing accidents largely depends upon the amount of publicity given to their energetic work.

12 March, 1930

A. B. INGRAM, ESQ.,
Vice-Chairman,

Ontario Railway and Municipal Board,
Parliament Buildings,
Toronto 2

Subject: Your 24th Annual Report

Dear Mr. Ingram:

Confirming our conversation of yesterday relative to the Board being willing to publish in its report a reference to the work of the Ontario Safety League and the Canadian League, for which I feel grateful, I may say that our beloved President, Major-General Sir John M. Gibson, K.C.M.G., passed away in June last. Sir John had been President since 1921 until his death in 1929. The Executives of both Leagues unanimously elected Colonel The Honourable Henry Cockshutt, LL.D., Brantford, as President, formerly Lieutenant-Governor of Ontario.

▶ We are preparing for a joint Annual Meeting to be held on Wednesday, March 26th, 1930, in the King Edward Hotel, Toronto. A business meeting and election of officers will be held in

the Yellow Room of the King Edward Hotel at 4.30 p.m., to be presided over by Mr. H. H. Champ of the Steel Company of Canada, Limited, Hamilton. The dinner meeting will be held in the Crystal Ball Room at 6.30 p.m., and presided over by Mr. Arthur Hewitt, General Manager of the Consumers' Gas Company of Toronto.

Colonel The Honourable W. H. Price, Attorney-General of Ontario, will address the dinner meeting on "The Necessity for Safety Education," after which a demonstration of our safety message to the school children of Ontario, illustrated by motion pictures and lantern slides, will be given by our Field Secretary.

I am enclosing advance copy of the Annual Reports (1929) for the Ontario Safety League and Canadian National Safety League, together with memoranda with reference to the subjects covered and their page numbers.

Existence of Safety League.—This is the seventeenth year of the existence of the Ontario Safety League, which has a Provincial charter "without share capital."

Money and How Spent.—All of the money collected is spent for accident prevention work.

Work Started.—We started safety work on January 2nd, 1914.

Accident Records.—In Toronto, during the year before, 1913, automobiles, trucks and motor-cycles had killed six people for every thousand of these motor vehicles registered. This toll was reduced 50 per cent. during 1914, and has shown a gradual reduction since, which for the last seven years has been less than one person killed per thousand motor vehicles registered. Had the toll of 1913 been continued up to the beginning of this year, in Toronto alone, the automotive hazard would have killed 4,650 people. The actual number killed during these sixteen years was 754.

The fatalities from motor vehicles in Toronto seem to bear a direct ratio to the mean monthly temperature, the peak of fatalities coinciding for years with the higher temperatures. It is reasonable to suppose that the records for Toronto are applicable on a larger scale, to the balance of the Province, as our work since the early years of our organization has extended to cover the entire Province. The motor vehicle represents what might be classed as the most frequent hazard at the present time, but only until recently, 1926, have the motor vehicle fatalities equalled the aquatic fatalities in the Province as a whole.

Special School Safety Work.—In 1926 the Provincial Government was good enough to increase our grant. This enabled us to do intensive special safety work in the schools. During that year there were twenty-three less children of school age killed than in 1925; the next year, 1927, there were thirteen less killed than in 1926; in 1928, there were three less killed than in 1927, and in 1929, nineteen less were killed than in 1928, as 149 is to 168. This, of course, is very gratifying and shows results that are encouraging when due consideration is given to the fact that we are now able only to carry our safety message to all of the principal schools in Ontario once every two years.

Fatal Accident Comparisons.—In making for Ontario a comparison of all fatal accidents during 1928 and 1929, it is a pleasure to note that there were sixty-one less people killed by drowning, forty-four less by falls, twenty-nine less by mines and quarries, and thirteen less by horse-drawn vehicles, in 1929. There is an increase in the total fatalities during the year from all accidental hazards of only twenty-seven in comparison with 1928, as 1,850 is to 1,823, which is very small when the increased population and increased hazards are taken into account.

It is a matter of regret that in 1929 there were ninety-nine more people killed by motor vehicles in Ontario than in 1928, as 576 is to 477. In going into the subject thoroughly, however, we find that during the year 1928, 169 million gallons of gasoline were consumed in Ontario, and 477 people killed, making a ratio of 2.822 persons killed for every million gallons of gasoline consumed.

In 1929, 224 million gallons of gasoline were consumed with 576 fatalities, giving a ratio of 2.571 persons killed to every million gallons of gasoline consumed. This illustrates the value of safety education in causing a decrease in accidents, as it is evident that although the gasoline consumed by motor vehicles increased approximately 33 $\frac{1}{3}$ per cent., the ratio of fatalities decreased.

It would appear, therefore, that the educational efforts by the League have had a very stimulating effect on motorists in general regarding the need of Care, Courtesy and Common Sense.

Other Matters of Interest.—You will find other things of interest in the advance copy of our Sixteenth Annual Report herewith.

In appreciation of your interest in our work, I am

Yours very truly,
J. F. H. WYSE,
General Manager.

ONTARIO SAFETY LEAGUE—SYNOPSIS OF 1929 CAMPAIGN

The year 1929 completed the sixteenth year of the League's campaign in safety work.

Early in the year an Essay Contest was held in the schools of Ontario on Highway Safety; \$605 was distributed in cash prizes.

During the second half of the school term a drawing contest on Accident and Fire Prevention was held, with \$400 distributed in cash prizes.

During the full school terms an intensive campaign of lecturing on safety, illustrated with motion pictures and lantern slides, was carried on in the schools of the Province, in seventy-nine

different cities, towns and villages; 418 schools were visited and 179,000 pupils attended the lectures.

Talks on "Safe Driving" were broadcast by radio and literature distributed to over 4,000 garages in all parts of Ontario in addition to a mailing list of several thousand.

Five hundred and fifty thousand special cards were distributed to motorists enclosed with 1929 license plates by courtesy of the Minister of Highways.

Following is a list of literature distributed throughout the year:

51,000 Industrial Bulletins.
64,500 Special Bulletins.
64,900 Traffic Bulletins.
550,000 Special Cards to Motorists.
175,000 School Bulletins.
200,000 Letters to Parents.
11,000 Cards and Reports.
12,000 Safety Calendars.
14,700 Circulars and Circular Letters.

ONTARIO SAFETY LEAGUE RECORDS

PROVINCE OF ONTARIO
Accidents for the Years 1928 and 1929

Cause	1928		1929		Fatalities	
	Fatal	Non-Fatal	Fatal	Non-Fatal	Decrease	Increase
Automotive vehicles.....	477	5,397	576	5,699		99
Drownings.....	382	417	321	324	61	
Falls.....	240	1,272	196	1,883	44	
Railroad.....	97	136	108	165		11
Conflagration.....	64	237	60	225	4	
Burns, scalds.....	77	231	70	288	7	
Asphyxia.....	33	162	48	212		15
Horse vehicle.....	36	146	23	145	13	
Firearms.....	35	79	40	91		5
Falling, flying object.....	48	371	39	406	9	
Machinery.....	13	295	36	288		23
Animals.....	20	285	30	232		10
Street cars.....	19	81	24	152		5
Crushed.....	23	61	30	87		7
Poisoning.....	17	26	16	44	1	
Electrocution.....	25	34	30	27		5
Explosion.....	18	113	26	156		8
Strangulation, suffocation.....	12	4	16	3		4
Elevator.....	10	50	11	39		1
Septic poisoning.....	24	16	18	37	6	
Bicycle.....	14	188	13	200	1	
Cave-in.....	16	47	16	35		
Object moving or stationary.....	3	16	9	31		6
Collapses.....	12	70	4	92	8	
Sports.....	6	245	11	271		5
Aeroplane.....	8	23	20	34		12
Farm implements.....	5	16	2	24	3	
Exposure.....	9	8	5	21	4	
Coasting, skating.....	7	60	2	84	5	
At work (no particulars).....	1	35	1	29		
Cutting, piercing.....		151	3	336		3
Swallowed foreign object.....	3	25	7	35		4
Fracture.....	4	193		367	4	
Hand and foot.....		202		372		
Mine, quarry.....	63	44	34	23	29	
Swimming, diving.....	2	10	1	12	1	
Compressed air.....		1	1			1
Motor launch.....		1	3	8		3
Fireworks.....		9		8		
Ice boat.....						
Total.....	1,823	10,757	1,850	12,485	200	227

ONTARIO SAFETY LEAGUE RECORDS

CITY OF TORONTO

Accidents for the Years 1928 and 1929

Cause	1928		1929		Fatalities	
	Fatal	Non-Fatal	Fatal	Non-Fatal	Decrease	Increase
Automotive vehicles.....	64	1,001	70	1,217		6
Drownings.....	15	112	8	47	7	
Falls.....	99	602	89	1,151	10	
Asphyxia.....	20	69	24	120		4
Burns, scalds.....	15	83	16	105		1
Poisoning.....	10	8	7	10	3	
Street car.....	9	39	16	76		7
Electrocution.....	2	10	4	6		2
Elevator.....	6	26	2	27	4	
Machinery.....	1	111	3	134		2
Railroad.....	4	8	6	11		2
Strangulation, suffocation.....	6		8			2
Bicycle.....	4	81	4	68		
Falling, flying object.....	6	185	5	220	1	
Animals.....	2	55	1	57	1	
Septic poisoning.....	2	4	4	13		2
Fracture.....	1	121		284	1	
Conflagration.....	6	70	8	82		2
Horse vehicle.....	2	39		30	2	
Crushed.....	3	22	4	41		1
Firearms.....	1	7		7	1	
Cutting, piercing.....		100		279		
Sports.....	1	102	1	142		
Explosion.....	3	26	7	21		4
Coasting, skating.....	1	17	1	36		
Hand, foot.....		150		307		
At work (no particulars).....		27		24		
Cave-in.....	1	10	3	11		2
Swallowed foreign object.....	1	9	4	19		3
Diving, swimming.....		4		5		
Object, moving or stationary.....		9	1	11		1
Compressed air.....						
Collapses.....		14	2	32		2
Exposure.....				2		
Fireworks.....		4		3		
Total.....	285	3,125	298	4,598	30	43

ACCIDENT RECORDS FOR SEVENTEEN YEARS—1913 TO 1929
INCLUSIVE—IN TORONTO ONLY

FATALITIES PER THOUSAND AUTOMOTIVE VEHICLES

1913	6.0	1921	1.1
1914	3.0	1922	1.3
1915	1.3	1923	0.9
1916	1.3	1924	0.6
1917	1.3	1925	0.5
1918	1.6	1926	0.5
1919	1.7	1927	0.8
1920	1.9	1928	0.7
		1929	0.6

Had the ratio of fatalities for 1913 been continued, we would have had the following:
(Estimated) (Actual)

1914	37.8	1914	21
1915	50.4	1915	11
1916	81.0	1916	18
1917	118.2	1917	26
1918	135.6	1918	37
1919	171.6	1919	49
1920	208.8	1920	67
1921	244.8	1921	48
1922	267.5	1922	56
1923	342.6	1923	54
1924	365.4	1924	48
1925	405.1	1925	43
1926	451.7	1926	41
1927	524.7	1927	71
1928	584.8	1928	64
1929	660.0	1929	70
Total	4,650.0	Total	724

Fatalities from all accident causes, 1915 to 1929 inclusive, in Toronto:

1915	188	1922	230
1916	225	1923	239
1917	227	1924	200
1918	259	1925	212
1919	240	1926	216
1920	300	1927	246
1921	236	1928	285
		1929	298

Fatalities from all accident causes for four years, 1926 to 1929 inclusive, in the Province of Ontario:

1926	1,451	1928	1,823
1927	1,548	1929	1,850

In Toronto, the hazards from falls and automotive vehicles have the most victims.
In Ontario, as a whole, deaths from the automotive hazard head the list.

OFFICE OF
MINISTER OF PUBLIC WORKS AND HIGHWAYS

Toronto, January 31, 1930

With a registration of over half a million motor vehicles in Ontario, as compared with just over 100,000 eleven years ago, the subject of highway safety has come to the forefront of public attention in the last two or three years.

During the past two years, the Department of Highways embarked upon a vigorous campaign of safety education, with, I have reason to think, good results, and I should like to take this opportunity of thanking the Ontario Safety League for the valuable co-operation it afforded. "Care, courtesy and common sense" were the three factors we most strongly stressed in our campaign, believing, as your organization appreciates, that most accidents are preventable.

On the occasion of the League's Sixteenth Annual Meeting, I am glad to commend the work you have done in the past and feel confident your labours will continue, in the future, to bear fruit.

GEO S. HENRY,
Minister of Public Works and Highways

THE HAMILTON AND BARTON RAILWAY COMPANY
BALANCE SHEET AS AT DECEMBER 31st, 1929

ASSETS

Dec. 31st 1928			
	CURRENT.....		\$2,402 99
\$44 44	Cash on hand.....	\$130 37	
	Bank of Nova Scotia.....	1,468 81	
4,033 05	Savings.....	\$1,152 60	
385 64	Current.....	316 21	
		\$1,468 81	
122 85	Accounts receivable.....	106 50	
50 00	Conductors.....	50 00	
	Inventories:		
568 14	Oil and waste, fuel and stores.....	147 92	
540 52	Insurance prepaid.....	499 39	
		\$2,402 99	
\$5,744 64			
	INVESTED.....		71,152 40
\$105,255 31	Plant and equipment, road bed, buildings, etc.....	\$105,255 31	
30,945 26	Less: Reserve for depreciation.....	34,102 91	
		\$71,152 40	
\$74,310 05			
	LIABILITIES		
	CURRENT.....		\$396 25
\$1,439 20	Accounts payable.....	\$105 75	
293 00	Commutation tickets.....	290 50	
		\$396 25	
\$1,732 20			
	SHAREHOLDERS.....		73,159 14
\$61,500 00	Capital stock.....	\$61,500 00	
16,822 49	Profit and loss.....	11,659 14	
		\$73,159 14	
\$78,322 49			
			\$73,555 39 \$73,555 39

PROFIT AND LOSS ACCOUNT FOR YEAR ENDED DECEMBER 31st, 1929

Dec. 31st 1928			
\$23,238 91	EARNINGS.....		\$21,673 85
59 40	INTEREST.....		119 55
240 00	RENT.....		240 00
\$23,538 31			
	EXPENSES.....		\$23,506 75
\$30 00	Clothing.....		
6,888 38	Fuel (coal).....	6,975 63	
454 63	General.....	337 51	
447 62	Insurance.....	643 88	
100 20	Oil and waste, stores.....	375 91	
315 05	Printing and stationery.....	219 96	
808 84	Repairs.....	630 32	
1,090 32	Taxes and water rates.....	1,129 89	
10,148 00	Wages.....	10,036 00	
3,157 65	Depreciation.....	3,157 65	
		\$23,506 75	
\$23,540 69			
2 38	LOSS FOR PERIOD.....		1,473 35
\$23,538 31			\$23,506 75 \$23,506 75

PROFIT AND LOSS ACCOUNT

Balance forward, 31st December, 1928.....		\$16,822 49
Dividend paid, December 31st, 1929.....	\$3,690 00	
Loss for year 1929.....	1,473 35	
Balance per Balance Sheet.....	11,659 14	
		<u>\$16,822 49</u> <u>\$16,822 49</u>

WENTWORTH INCLINE RAILWAY, LIMITED

PROFIT AND LOSS ACCOUNT FOR YEAR ENDED DECEMBER 31st, 1929

EARNINGS:		
Ticket sales, passengers, freight, etc.....		\$43,223 57
Interest and dividends.....		4,145 64
EXPENSES.....	\$34,448 67	
Fuel, power and light.....	\$1,766 00	
General expense, taxes, directors' fees and salary....	4,266 94	
Insurance.....	2,063 45	
Insurance claims.....	180 00	
Oil and waste.....	158 14	
Repairs.....	1,546 78	
Wages.....	18,509 40	
Depreciation.....	5,957 96	
	<u>\$34,448 67</u>	
NET PROFIT FOR PERIOD.....		\$12,920 54
		<u>\$47,369 21</u> <u>\$47,369 21</u>

PROFIT AND LOSS SUMMARY

Balance, 1st January, 1929.....		\$153,763 60
Net profit for year 1929.....		12,920 54
Income tax for year 1928.....	\$909 59	
Dividend paid in 1929.....	1,668 00	
Balance per Balance Sheet.....	164,106 55	
		<u>\$166,684 14</u> <u>\$166,684 14</u>

BALANCE SHEET AS AT DECEMBER 31st, 1929

ASSETS

CURRENT.....		\$168,318 86
Cash on hand.....	\$318 33	
Balance in Bank.....	3,345 27	
Conductors' loan accounts.....	50 00	
Accounts receivable.....	381 49	
Bonds and stocks at cost.....	163,703 77	
Prepaid insurance.....	520 00	
	<u>\$168,318 86</u>	
INVESTED.....		71,858 98
Plant and equipment, road bed, etc.....	\$114,409 22	
Buildings.....	9,500 00	
Land.....	29,078 25	
	<u>\$152,987 47</u>	
Less reserve for depreciation.....	81,128 49	
	<u>\$71,858 98</u>	

LIABILITIES

CURRENT.....		\$3,136 50
Accounts payable.....	\$376 00	
Tickets outstanding.....	2,460 50	
Insurance—reserve.....	300 00	
	<u>\$3,136 50</u>	
SHAREHOLDERS.....		\$237,041 34
Capital stock.....	\$27,800 00	
Special reserve.....	45,134 79	
Profit and loss account.....	164,106 55	
	<u>\$237,041 34</u>	
		<u>\$240,177 84</u> <u>\$240,177 84</u>

TABULATION OF CAR MILES RUN, PASSENGERS CARRIED, ACCIDENTS, ETC.
FOR YEAR ENDING DECEMBER 31ST, 1929

Name of Railway	Length of track owned, miles	Length of switches and signals, miles	Passenger car miles run	Passengers carried	Passengers carried per mile track owned	Accidents		Number employed	Passenger Cars			Other			Service Cars		Miscell.		Cost of railway construction equipment, land and buildings per mile of track owned
						Killed	Injured		Enclosed Cars	Open Cars	Trailers	Baggage and mail	Cattle and box	Platform	Coal dump	Tool	Snow sweepers	Snow plows		Loading cranes	Locomotives	Ferry boats
Buffalo & Fort Erie Ferry & Railroad Co.	4	2.50	320,424	1,271,335	317,833	..	..	38	16	..	..	..	..	..	2	..	..	..	61,637 49
Cornwall St. Ry. Co.	18.916	6.580	846,937	3,116,014	††	4	..	57	18	5	..	..	..	..	1	..	..	..	48,203 64
Fort William Electric Ry.	8.490	1.560	823,818	1,415,862	166,708	7	..	32	8	..	..	..	..	..	1	..	..	..	43,514 79
Guelph Radial Ry.	34.3	..	3,204,125	24,545,987	..	65	..	††	88	..	..	..	..	..	4	..	..	..	140,859 80
Hamilton & Dundas St. Ry.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hamilton & Grimsby Ry.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beamsville Ry.	22.6	3.6	204,445	669,426	..	3	..	..	8	2	..	..	..	..	..	..	..	..	16,224 29
Hamilton & Barton Incline Ry.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Huntsville & Lake of the River Ry.	1.438	.312	..	8,915	..	..	..	..	1	3	..	..	..	..	..	..	..	..	17,332 11
Bays Ry.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hydro-Electric Ry. (Fisher Div.)	56.477	5.404	2,906,575	16,823,444	297,892	3	125	328	78	..	..	..	..	..	1	..	..	..	87,641 60
International Ry. Co. (Niagara Falls Park & River Div.)	1.314	23.930	290,575	835,462	34,904	..	..	..	15	22	..	..	..	..	1	..	..	..	..
International Transit Co.	4.97	.09	249,144	1,391,583	41,200	26	..	18	..	7	..	..	..	..	..	..	..	..	..
Kingston, Portsmouth & Cataract Ry.	8	..	266,103	1,172,963	146,620	1	..	..	11	10	..	..	..	..	1	..	..	..	24,872 24
Kitchener & Bridgeport Ry.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kitchener & Waterloo Ry.	9.41	.91	352,090	3,324,052	353,247	..	..	33	..	9	..	..	..	..	..	..	..	..	49,511 30
London Street Ry.	34.04	.98	2,259,799	11,851,519	..	1	64	..	39	..	..	..	..	..	2	..	..	..	45,660 17
Mount McKay & Kaka-beka Falls Ry.	5.000	1.500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Niagara Peninsula Ry.	3.325	2.117	..	..	..	..	..	..	7	..	..	..	..	..	..	..	..	..	35,758 95
Port Arthur Civic Ry.	19.53	..	742,018	3,195,796	163,635	1	..	..	54	..	..	..	..	..	..	..	..	..	10,211 56
Sarnia Street Ry.	8.25	1	205,694	807,974	..	..	..	..	27	10	..	..	..	..	..	..	..	..	29,776 11
Sudbury-Copper Cliff Suburban Ry.	7.9	..	166,440	938,720	118,825	2	1	..	11	..	..	..	..	..	1	..	..	..	31,711 66
Thurlow Ry (steam)	2.671	4.660	..	..	..	..	..	..	27	..	..	..	..	..	..	..	..	..	13,102 70
Tilson Spur Line	1.010	.051	All rolling stock owned	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Toronto Transportation Commission	222.346	32.388	28,101,827	206,822,838	..	26	1,689	4,323	734	..	258	..	..	..	30	8	..	..	191,620 03
Toronto Transportation Commission	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Toronto Transportation Commission	49.453	11.091	593,137	1,472,381	..	1	17	20	..	..	..	..	..	..	..	..	..	..	38,072 84
Toronto Transportation Commission	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Toronto Transportation Commission	14.706	.228	783,059	6,370,674	..	..	..	..	..	..	..	..	..	..	..	..	..	..	95,402 34
Wentworth Incline Ry.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

††Car miles not reported.

TABULATION OF COMPARISON WITH PREVIOUS YEARS AS TO CAR MILES RUN, PASSENGERS CARRIED
FOR YEAR ENDING DECEMBER 31ST, 1929

Name of Railway	Length of Track		Car Miles Run		Passengers Carried		Accidents		Net Earnings		
	In-crease	De-crease	In-crease	De-crease	In-crease	De-crease	Killed		In-crease	De-crease	
							In-crease	De-crease			
Buffalo & Fort Erie Ferry & Railroad Co.											
Cornwall Street Railway	50		26,708		28,611	None in either year.					\$ c.
Fort William Street Railway	147		28,884		386,954	2					14,252 91
Guelph Radial Railway			3,932		21,922	2					+13,526 90
Hamilton Street Railway			66,313		1,667,524	4					14,117 34
Hamilton & Dundas Railway			Operating September 5th, 1923.			2					174,061 38
Hamilton, Grimsby & Beamsville Railway			13,029		102,142				5		12,427 60
Hamilton & Barton Incline Railway			See statement.								
Huntsville & Lake of Bays Railway			201,209		1,893	None in either year.					646 29
Hydro-Electric Railways (Essex Division)			1,427		446,844	3					32,091 39
International Ry. Co. (Niagara Falls Park & River Division)			.096		95,511						
International Transit Co.					9,928						
Kingston, Portsmouth & Cataract					1,033						
Kitchener & Bridgeport and Kitchener & Waterloo Railway			27,306		5,668	1					*25,400 47
London Street Railway					6,177						9,932 64
Mount McKay & Kakabeka Falls Railway			46,903		222,234						
Niagara Peninsular Railway					532,367				1		3,042 62
Port Arthur Civic Railway									39		3,151 70
Sarnia Street Railway			16,022		483,584	1					10,590 19
Sudbury-Copper Cliff Suburban Railway			66,427		79,231						4,415 34
Thurlow Railway (steam)					306,001	2			1		22,697 60
Tilson Spur Line					13,179,911						2,693 35
Toronto Transportation Commission			10,087		1,948,147	9					121 09
Toronto Transportation Commission: Toronto & York Railways			1,157,751		4,891,005						16,207 70
Toronto Transportation Commission: Township of York Railways			64,862		216,175						*139,022 82
Zentworth Incline Railway			See statement.								*32,768 29

(*) Decrease in deficit on year's operation.

(†) Increase in deficit on year's operation.

TABULATION OF OPERATING COSTS FOR YEAR ENDING DECEMBER 31ST, 1929

Name of Railway	General Expenses		Main-tenance of Roadbed and Buildings		Main-tenance Equipment		Motive Power		Wages		Damage to Persons and Property		Miscellaneous		Total		Operating Cost per Car Mile Run	
	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.		
Buffalo & Fort Erie Ferry & Railroad Co.	174	75	10,383	13	3,327	78	1,104	66	7,221	73					22,212	05	\$	††
Cornwall Street Railway Co.	12,017	04	8,351	83	15,034	64	4,905	90	25,534	30	207	67	1,115	57	67,166	95	20,962	
Fort William Electric Railway	16,547	09	14,927	77	29,026	30	23,120	33	68,205	98			3,865	94	155,893	37	18,400	
Guelph Radial Railway	15,509	39	9,066	93	20,951	87	9,890	60	22,497	50	5	10	4,073	48	81,994	87	25,324	
Hamilton Street Railway	82,392	87	100,513	50	251,934	85	160,750	40	455,885	22	43,065	12	145,475	06	123,997	02	38,700	
Hamilton & Dundas Street Railway	Ceased operating Sept. 5th, 1923																	
Hamilton, Grimsby & Beamsville Railway	3,635	76	19,996	18	39,018	28	19,234	80	42,493	11	5,944	24	51,465	72	181,788	09	88,911	
Hamilton & Barton Incline Railway	See statement.																	
Huntsville & Lake of Bays Railway	247	94	267	69	633	09			1,235	71			594	81	2,979	24	††	
Hydro-Electric Railways (Essex Division)	157,820	51	69,192	35	141,304	45	116,285	70	312,939	16	360	44	142,767	43	940,730	04	32,265	
International Railway Co. (Niagara Falls Park and River Division)	48,119	21	26,203	20	12,772	44	15,711	53	50,565	79	11,909	31	9,003	25	174,284	73	59,920	
International Transit	7,501	25	3,638	29	5,595	32	7,920	00	14,202	40			5,449	26	44,306	52	17,783	
Kingston, Portsmouth & Cataract	8,899	99	3,065	98	11,441	82	3,604	24	19,068	50			333	16	46,413	69	17,442	
Kitchener & Waterloo and Kitchener & Bridgeport Railway	14,974	45	4,396	11	6,625	24	13,772	74	44,051	48	2,632	72	1,773	33	88,226	07	23,353	
London Street Railway	39,935	27	14,529	26	69,733	58	44,196	18	176,487	43	18,096	77	97,240	08	495,218	54	21,914	
Mount McKay & Kakabeka Falls Ry	556	15			825	65									2,197	10	††	
Niagara Peninsular Railway			6,781	71	4,204	34			3,473	50					16,677	55	††	
Port Arthur Civic Railway	16,846	98	30,212	19	29,596	53	20,000	00	46,386	38			19,482	47	162,524	55	21,903	
Sarnia Street Railway	23,712	43	2,562	77	11,283	49	8,625	34	15,186	52			2,406	61	63,777	16	31,005	
Sudbury-Copper Cliff Suburban Ry.	7,574	62	21,709	20	7,654	08	7,533	08	18,234	62			15,549	89	78,255	49	47,100	
Thurlow Railway (steam)			19,306	30	12,442	93	1,514	47	10,435	70			6,045	00	49,744	40	††	
Tilson Spur Line	All rolling stock owned and operated by Canadian National Railways.																	
Toronto Transportation Commission	598,537	13	764,661	51	807,818	24	1,301,593	80	3,820,962	20	128,503	80	1,557,235	59	9,029,312	27	31,791	
Toronto Transportation Commission	31,461	05	61,202	29	30,615	44	82,994	98	125,174	78	5,705	66	17,516	44	354,640	64	59,805	
Toronto Transportation Commission: Township of York Railways	20,672	53	11,580	67	23,988	50	46,708	77					114,703	27	217,653	74	27,775	
Wentworth Incline Railway	See statement.																	

††Car miles not reported.

TABULATION OF CHARGES OTHER THAN OPERATING COSTS FOR YEAR ENDING DECEMBER 31st, 1929.

Name of Railway	Interest on Funded Debt		Interest and Discount on Unfunded Debt		Taxes		Transfer to Special Accounts		All Charges other than Operating Costs		Total Expenditure including Operating Costs		Total Expenditure excluding Operating Costs		Total Revenue from all sources		Per Car Mile Run		Net Deficit from Year's Operations		Net Surplus from Year's Operations		
	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	
Buffalo & Fort Erie Ferry & Railroad Co.																							
Cornwall Street Ry.	8,050 00																						
Fort William Street Ry.	60,210 00																						
Guelph Road.	26,119 45																						
Hamilton Street Ry.																							
Hamilton & Dundas Ry.																							
Hamilton, Grimsby & Beamsville Ry.																							
Hamilton & Burton Incline Ry.	7,500 00																						
Montvale & Lake of Bays Ry.																							
Hydro-Electric Ry. (Dissex Div.)																							
International Ry. (Niagara Falls Park & River Division)	262,336 91																						
International Transit Co.	30,000 00																						
Kingston, Fortsmith & Cataract Ry.																							
Kitchener & Bridgeport and Kitchener & Waterloo Ry.	3,930 00																						
London Street Ry.	28,500 00																						
Mt. McKay & Kakabeka Falls Ry.																							
Niagara Peninsula Ry.																							
Port Arthur Civic Ry.	24,058 01																						
St. Catharines Ry.	7,520 00																						
St. Catharines-Clyff Suburban Ry.																							
Thornhill Ry. (steam)	4,500 00																						
Tilson Spur Line																							
Toronto Transportation Commis- sion																							
Toronto Transportation Commis- sion: Toronto & York Rys.	2,124,796 66																						
Toronto Transportation Commis- sion: Township of York Ry.	138,614 53																						
Wentworth Incline Ry.	66,071 12																						

*Does not include "Special Accounts."

††Car miles not reported.

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REPORT
OF THE
INSPECTOR OF LEGAL OFFICES
ONTARIO
1929

PRINTED BY ORDER OF
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SESSIONAL PAPER No. 18, 1930



ONTARIO

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1930

REPORT

INSPECTOR OF LEGAL OFFICES

ONTARIO

1924



Printed and Published by The United Press, Limited, Toronto, Ontario, Canada.



TO THE HONOURABLE W. D. ROSS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned begs respectfully to present to Your Honour the Annual Report of the Inspector of Legal Offices for the year ending 31st December, 1929.

WILLIAM H. PRICE,
Attorney-General.

Toronto, March, 1930.

REPORT

of the

Inspector of Legal Offices

Ontario, 1929

TO THE HONOURABLE W. D. ROSS,
Lieutenant-Governor of the Province of Ontario.

SIR:—

I have the honour to present my report as Inspector of Legal Offices for the year ending December 31st, 1929.

Owing to the fact that my immediate predecessor, Mr. A. N. Middleton, performed the duties both of Inspector of Legal Offices and Public Trustee during most of 1929, it was impossible for him to inspect the out of town offices but these were visited and audited during the year by Mr. W. A. James, the auditor attached to my Department, who found them to be in uniformly good condition.

Since my appointment on November 15th, 1929, I have personally inspected the offices in twelve of the county towns and found the work generally well done.

The Assistant Inspectors, who look after Division Court offices and Police Magistrates other than those in the county towns, covered practically the entire province during the year, and report that the offices inspected are, on the whole, efficiently conducted.

The revenue collected by this office for the year 1929 from the different public offices under my supervision amounted to \$575,586.96 made up as follows:

Police Magistrates, fines and fees	\$197,046 11
(The above amount represents moneys for fines and fees actually received by me and does not include fines and fees paid direct to inspectors under the L.C.A.)	
Local Registrars, S.C.O., County Court and District Court Clerks and Surrogate Registrars	153,498 24
Crown Attorneys and Clerks of the Peace	98,846 83
Sheriffs	22,976 36
Registrars of Deeds and Local Masters of Title	32,894 26
Division Court Clerks and Bailiffs	67,650 83
Estreats and fines	1,670 45
Miscellaneous	141 25
Bankruptcy fees	862 63
Total	\$575,586 96

The revenue from the same sources for 1928 was \$389,109.66, so that this year the Province receives from these offices an increase of \$186,477.30.

Considerable delay in the preparation of this report was caused by the failure of some of the officers to forward their returns by January 15th as provided by statute, and in fact, in two instances, despite every effort on my part, the returns have not yet reached me and this report is, to that extent, incomplete.

I desire to express my thanks to the officers for the assistance afforded me in my inspections, and also to my Assistant Inspectors, auditor and office assistants all of whom have most capably performed their various duties; and I would especially thank Mr. I. A. Humphries, K.C., solicitor to the Attorney-General, for so kindly giving me at all times the benefit of his wide experience on matters touching this office.

I attach hereto the following schedules and statements with reference to the office which seem to me to be of interest to the various officers and the profession and others having business with them.

1. Statement surrogate clerks offices.
2. Statement business, Administrative Branch, Osgoode Hall.
3. Statement business, Appellate Courts, Osgoode Hall.
4. Financial statement of judicial offices, namely: Sheriffs, Surrogate Judges, Local Masters, S.C.O., Local Registrars, County and District Court Clerks and Surrogate Registrars.
5. Financial statement respecting Land Titles Offices.
6. Financial statement respecting Division Courts.
7. Financial statement respecting Registrars of Deeds.
8. Financial statement respecting Police Magistrates.
9. Appointments.
10. Observations by Inspector.

All of which is respectfully submitted.

I have the honour to be, sir,

Your obedient servant,

JOSEPH SEDGWICK,
Inspector of Legal Offices.

Statement

- (a) Surrogate Clerk's Office.
- (b) Administrative Branch—Osgoode Hall.
- (c) Appellate Division—Osgoode Hall.
- (d) Master's Office—Osgoode Hall.

ANNUAL REPORT FOR YEAR 1929—SURROGATE CLERK'S OFFICE

1. Number of notices of application for probate and administration and certificates issued.....	12,549
2. Number of notices of application for guardianship received and certificates issued.....	83
3. Number of caveats filed.....	111
4. Number of searches other than by Surrogate Registrars.....	315
5. Fees for 1929.....	\$6,413 80

REPORT OF THE BUSINESS OF THE ADMINISTRATIVE BRANCH FOR THE YEAR
ENDING WITH THE 31ST OF DECEMBER, 1929—SENIOR
REGISTRAR'S DEPARTMENT

Number of writs of summons issued (of which 40 were concurrent writs).....	3,228
Actions entered in procedure book, commenced by writs issued during the year 1929.....	1,449
Actions entered in procedure book transferred from county court during 1929....	20
Actions entered in procedure book commenced by writ during previous years.....	50
Actions entered in procedure book otherwise than by writ.....	268
Praecipe orders issued.....	141
Records passed.....	595
Writs of execution, Fi. Fa., issued.....	892
Writs of execution, renewal, alias and pluries writs issued.....	229
Special writs (habeas corpus, etc.) issued.....	31
Actions entered for trial (with jury).....	157
Actions entered for trial (without jury).....	412
Amount of jury fees paid city treasurer.....	\$426 00
Court orders.....	509
Chamber orders.....	3,460
Deed polls entered and filed.....	181
Judgments without trial.....	95
Judgments after trial.....	225
Judgments in chambers.....	78
Judgments by default; mortgage actions.....	748
Judgments by default; ordinary actions.....	244
Judgments in mechanics' liens.....	31
Judgments in respect of writs issued, year 1921.....	1
Judgments in respect of writs issued, year 1923.....	1
Judgments in respect of writs issued, year 1924.....	1
Judgments in respect of writs issued, year 1925.....	2
Judgments in respect of writs issued, year 1926.....	7
Judgments in respect of writs issued, year 1927.....	35
Judgments in respect of writs issued, year 1928.....	288
Judgments in respect of writs issued, year 1929.....	1,115
Interlocutory judgments.....	14
Total judgments entered.....	1,472
Amount recovered on judgments exclusive of costs.....	\$3,828,486 98
Amount of taxed costs (including disbursements on judgments of all kinds).....	82,661 18
Mechanics' lien orders.....	235
Attorney-General orders.....	60
Fiats entered.....	798
Fees paid in law stamps in Senior Registrar's office.....	\$27,897 30
Fees paid in law stamps in Appellate Division.....	\$1,729 90

REPORT 1929—SUPREME COURT OF ONTARIO, APPELLATE DIVISION.

TWO COURTS

Appeals quashed.....	3
Appeals abandoned.....	7
Number of cases including motions heard by Divisional Court No. 1.....	279
Number of cases including motions heard by Divisional Court No. 2.....	369
Number of motions heard by full court.....	131

	Allowed	Dis- missed	Re- served	Varied	Standing for Argument	Total
					12	12
Appeals from County and Division Courts.....	31	77	6	6		120
Appeals from Trial or Single Judges	39	62	12	17		130
Criminal Appeals.....	15	42	3	2		62
Mining Court.....		2	2			4
Liquor Control Act.....		2	1			3
Master in Chambers.....			2			2
Official Arbitrator.....			2			2
Judgments.....	63	71		17		151
	148	256	28	42	12	474

ANNUAL RETURN OF FEES COLLECTED IN LAW STAMPS IN THE MASTER'S
OFFICE, OSGOODE HALL, FOR THE YEAR ENDING
DECEMBER 31, 1929

Master (References).....	\$493.10
Assistant Master's (References).....	384.90
Mechanic's Liens.....	325.00
Mortgage Foreclosures.....	2,105.20
Assistant Master (Official Receiver).....	3,408.00
	<u>\$6,716.20</u>

This does not include stamps collected in connection with the Master's Chamber work which are included in the return made by the Senior Registrar.

Financial Statement

Sheriffs.

Surrogate Judges.

Local Masters, S.C.O.

Crown Attorneys and Clerks of the Peace.

Local Registrars, S.C.O.

County and District Court Clerks.

Surrogate Registrars.

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929	Salary paid by Province	Total earnings and salary in all offices
			\$ c.	\$ c.	\$ c.
ALGOMA: Sault Ste. Marie	Sheriff	C. M. Macreath	4,079 08	1,000 00	5,079 08
	Surrogate Judge	Frederick Stone		1,000 00	
	Local Master	"			
	"	Judge J. M. Hall	79 68		79 68
	Crown Attorney	W. G. Atkin	8,393 53	400 00	8,793 53
	Clerk of the Peace	"			
	Local Registrar	T. J. Foster	4,752 59	750 00	5,502 59
	District Court Clerk Surrogate Registrar	" "			
BRANT: Brantford	Sheriff	J. W. Westbrook	4,568 60		4,568 60
	Surrogate Judge	A. D. Hardy		1,000 00	
	Local Master	"			
	Crown Attorney	W. M. Charlton, K.C.	6,563 49		6,563 49
	Clerk of the Peace	"			
	Local Registrar County Court Clerk Surrogate Registrar	H. J. Wallace " "	7,988 74	675 00	8,663 74
BRUCE: Walkerton	Sheriff	aD. M. Jermyn	2,682 33		2,682 33
	Surrogate Judge	W. G. Owens		1,000 00	
	Local Master	"			
	Crown Attorney	J. W. Freeborn	4,527 16		4,527 16
	Clerk of the Peace	"			
	Local Registrar County Court Clerk Surrogate Registrar	R. E. Clapp " "	5,558 23	675 00	6,233 23
CARLETON: Ottawa	Sheriff	bG. C. Richardson	10,515 49		10,515 49
	Surrogate Judge	E. L. Daly		1,000 00	
	Local Master	F. A. Magee	2,374 20		5,846 50
	Local Registrar	"	3,472 30		
	Crown Attorney	J. A. Ritchie, K.C.	5,753 31		5,753 31
	Clerk of the Peace	"			
	County Court Clerk Surrogate Registrar	C. L. Bray " "	16,481 26		16,481 26
COCHRANE: Cochrane	Sheriff	J. D. Mackay	4,618 61	1,192 92	5,811 53
	Surrogate Judge	J. B. T. Caron		1,000 00	
	Local Master	"			
	Crown Attorney	S. A. Caldbick	6,532 74	250 00	6,782 74
	Clerk of the Peace	"			
	Local Registrar	W. L. Warrell	3,598 35	600 00	4,198 35
	District Court Clerk Surrogate Registrar	" "			
DUFFERIN: Orangeville	Sheriff	H. Endacott	2,151 32		2,151 32
	Surrogate Judge	J. C. Moore		1,000 00	
	Local Master	"			
	Crown Attorney	R. D. Evans	Commute	dat \$1,270	
	Clerk of the Peace	"			
	Local Registrar	J. A. V. Preston, K.C.	2,574 40	675 00	3,249 40
	County Court Clerk Surrogate Registrar	" " " " " "			

aMr. Jermyn died Nov. 11th, 1929; D. McKechnie, Deputy, acted until end of December.

bThe amount due by Mr. Richardson has not yet been received.

the Province of Ontario for the year ending December 31, 1929.

Total office disbursements	Net earnings of office	Statutory amount paid to Province	Net income of officer	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1,211 72	3,867 36		3,867 36				Algoma
			1,000 00	6 10			
29 60	50 08		50 08				
1,000 00	7,793 53	1,896 76	5,896 77				Brant.
715 00	4,787 59	743 79	4,043 80		674 80	1,374 50	
1,197 62	3,370 98		3,370 98				Bruce.
			1,000 00	29 60			
264 69	6,298 80	1,149 40	5,149 40				
3,493 50	5,170 24	935 12	4,235 12		2,230 00	3,212 75	Carleton.
719 83	1,962 52		1,962 52				
			1,000 00	65 60			Cochrane.
357 50	4,169 66	84 83	4,084 83				
1,202 50	5,030 73	865 36	4,165 37		1,925 40	3,144 60	
							Dufferin.
4,015 49	6,500 00		6,500 00				
			1,000 00				
1,708 40	4,138 10	419 05	3,719 05				Dufferin.
480 40	5,272 91	636 45	4,636 46				
4,240 39	12,240 87	6,966 79	5,274 08		5,089 30	9,885 25	Dufferin.
2,167 85	3,643 68		3,643 68				
			1,000 00	25 10			Dufferin.
1,583 50	5,199 24	599 62	4,599 62				
992 00	3,206 35	41 27	3,165 08		474 70	244 75	
							Dufferin.
1,063 71	1,087 61		1,087 61				
			1,000 00	27 90			
161 60	3,087 80	17 56	3,070 24		622 00	946 00	

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929	Salary paid by Province	Total earnings and salary in all offices
			\$ c.	\$ c.	\$ c.
ELGIN: St. Thomas...	Sheriff.....	P. S. D. Harding.....	4,456 05		4,456 05
	Surrogate Judge.....	D. C. Ross.....		1,000 00	
	Local Master.....	C. F. Maxwell.....	59 40		
	Crown Attorney.....	A. McCrimmon, K.C..	5,258 12		5,258 12
	Clerk of the Peace.....	" "			
	Local Registrar.....	I. D. Cameron.....	6,133 69	675 00	6,808 69
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
ESSEX: Sandwich.....	Sheriff.....	C. N. Anderson.....	12,688 05		12,688 05
	Surrogate Judge.....	J. J. Coughlin.....		1,000 00	
	Local Master.....	A. A. MacKinnon.....	1,380 85		1,380 85
	Crown Attorney.....	J. S. Allan.....	Commuted	at \$5,000.00.	
	Clerk of the Peace.....	" "			
	Local Registrar.....	W. B. S. Craig.....	22,577 16	675 00	23,252 16
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
FRONTENAC: Kingston.....	Sheriff.....	R. F. Vair.....	3,362 35		3,362 35
	Surrogate Judge.....	H. A. Lavell.....		1,000 00	
	Local Master.....	J. B. Walkem, K.C....	130 25		130 25
	Crown Attorney.....	T. J. Rigney, K.C....	5,660 89		5,660 89
	Clerk of the Peace.....	" "			
	Local Registrar.....	C. H. Wood.....	2,950 98	675 00	3,625 98
	County Court Clerk..	" "			
	Surrogate Registrar..	Helen Fraser.....	3,199 50		3,199 50
GREY: Owen Sound...	Sheriff.....	Wm. Breese.....	3,651 84		3,651 84
	Surrogate Judge.....	C. T. Sutherland.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	T. H. Dyre.....	Commuted	at \$3,010.00 per	
	Clerk of the Peace.....	" "			
	Local Registrar.....	T. J. Rutherford.....	7,130 80	750 00	7,880 80
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
HALDIMAND: Cayuga.....	Sheriff.....	W. S. Hudspeth.....	2,541 75		2,541 75
	Surrogate Judge.....	G. H. Hopkins.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	H. Arrell, K.C.....	4,296 89		4,296 89
	Clerk of the Peace.....	" "			
	Local Registrar.....	J. C. Eccles.....	3,031 80	600 00	3,631 80
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
HALTON: Milton.....	Sheriff.....	G. O. Brown.....	3,494 88		3,494 88
	Surrogate Judge.....	^a W. N. Munro.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	W. J. Dick, K.C.....	5,572 03		5,572 03
	Clerk of the Peace.....	" "			
	Local Registrar.....	W. J. McClenahan...	4,316 27	600 00	4,916 27
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			

^a W. N. Munro appointed Surrogate Judge, Oct. 17th, 1929, Judge Elliott having retired.

the Province of Ontario for the year ending December 31, 1929.—Continued.

Total office disbursements	Net earnings of office	Statutory amount paid to Province	Net income of officer	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1,718 66	2,737 39		2,737 39				Elgin.
	59 40		1,000 00				
986 35	4,271 77	135 88	4,135 89				
1,511 00	5,297 69	998 85	4,298 84		1,585 90	2,730 25	
6,144 86	6,543 19	38 88	6,504 31				Essex.
	926 85		1,000 00				
454 00	926 85		926 85				
6,010 26	17,241 90	11,467 71	5,774 19		11,529 40	8,451 75	
779 07	2,583 28		2,583 28				Frontenac.
	80 25		1,000 00				
50 00	80 25		80 25				
1,209 60	4,451 29	225 65	4,225 64				
862 75	2,763 23		2,763 23		348 60		
300 00	2,899 50		2,899 50		2,387 70	3,167 00	
915 15	2,736 69		2,736 69				Grey.
			1,000 00				
				54 40			
annum							
1,272 75	6,608 05	1,897 25	4,710 80		1,810 35	2,788 30	
584 52	1,957 23		1,957 23				Haldimand.
			1,000 00				
876 00	3,420 89		3,420 89	30 60			
277 35	3,354 45	70 90	3,283 55		869 50	1,610 85	
1,378 89	2,115 99		2,115 99				Halton.
			1,000 00				
				35 70			
1,493 84	4,078 19	39 10	4,039 09				
639 50	4,276 77	488 38	3,788 39		956 20	1,864 75	

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929		Salary paid by Province		Total earnings and salary in all offices	
			\$	c.	\$	c.	\$	c.
HASTINGS: Belleville.....	Sheriff.....	aJ. H. Clare.....	3,520	11			3,520	11
	Surrogate Judge.....	J. F. Wills.....			1,000	00		
	Local Master.....	W. C. Mikel.....	56	90				
	Crown Attorney.....	B. C. Donnan.....	8,600	09			8,600	09
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	J. A. Kerr.....	7,667	70	750	00	8,417	70
	County Court Clerk.....	" ".....						
HURON: Goderich.....	Surrogate Registrar.....	" ".....						
	Sheriff.....	C. G. Middleton.....	3,703	79			3,703	79
	Surrogate Judge.....	E. N. Lewis.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	D. Holmes, K.C.....	Commute	d	at \$3,0	00.00	per	
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	R. Johnston.....	8,240	76	750	00	8,990	76
KENORA: Kenora.....	County Court Clerk.....	" ".....						
	Surrogate Registrar.....	" ".....						
	Sheriff.....	J. W. Humble.....	1,644	80	1,000	00	2,644	80
	Surrogate Judge.....	W. A. Dowler.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	H. P. Cooke, K.C.....	Commute	d	at \$1,9	70.00	per	
	Clerk of the Peace.....	" ".....						
KENT: Chatham.....	Local Registrar.....	J. N. Ladouceur.....	1,209	62	700	00	1,909	62
	District Court Clerk.....	" ".....						
	Surrogate Registrar.....	" ".....						
	Sheriff.....	E. W. Hardey.....	5,637	27			5,637	27
	Surrogate Judge.....	J. G. Kerr.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	H. D. Smith, K.C.....	11,958	44			11,958	44
LAMBTON: Sarnia.....	Clerk of the Peace.....	" ".....						
	Local Registrar.....	D. E. Douglas.....	8,615	42	675	00	9,290	42
	County Court Clerk.....	" ".....						
	Surrogate Registrar.....	" ".....						
	Sheriff.....	A. J. Johnston.....	3,668	59			3,668	59
	Surrogate Judge.....	A. E. Taylor.....			1,000	00		
	Local Master.....	" ".....						
LANARK: Perth.....	Crown Attorney.....	F. W. Willson, K.C.....	6,860	90			6,860	90
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	Alex. Saunders.....	7,003	00	675	00	7,678	00
	County Court Clerk.....	" ".....						
	Surrogate Registrar.....	" ".....						
	Sheriff.....	J. H. Ebbs.....	2,053	12			2,053	12
	Surrogate Judge.....	J. H. Scott.....			1,000	00		
LANARK: Perth.....	Local Master.....	" ".....						
	Crown Attorney.....	C. H. McKimm.....	3,406	18			3,406	18
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	J. S. L. McNeely.....	4,063	01	675	00	4,738	01
	County Court Clerk.....	" ".....						
	Surrogate Registrar.....	" ".....						

aJ. H. Clare died 20th Feb., 1930.

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929	Salary paid by Province	Total earnings and salary in all offices
			\$ c.	\$ c.	\$ c.
LEEDS AND GRENVILLE: Brockville....	Sheriff.....	a J. A. McCammon....	3,585 43		3,585 43
	Surrogate Judge.....	J. K. Dowsley.....		1,000 00	
	Local Master.....	" "			
	" ".....	Judge E. J. Reynolds..	274 50		274 50
	Crown Attorney.....	M. M. Brown, K.C....	6,704 37		6,704 37
	Clerk of the Peace....	" "			
	Local Registrar.....	A. E. Baker.....	8,042 30	750 00	8,792 30
	County Court Clerk..	" "			
Surrogate Registrar..	" "				
LENNOX AND ADDINGTON: Napanee.....	Sheriff.....	C. W. Vandervoort...	2,099 53		2,099 53
	Surrogate Judge.....	J. E. Madden.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	U. M. Wilson, K.C....	3,724 30		3,724 30
	Clerk of the Peace....	" "			
	Local Registrar.....	W. P. Deroche.....	2,230 83	600 00	2,830 83
	County Court Clerk..	" "			
Surrogate Registrar..	" "				
LINCOLN: St. Catharines.	Sheriff.....	H. O'Loughlin.....	5,327 07		5,327 07
	Surrogate Judge.....	J. S. Campbell.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	E. H. Lancaster, K.C.	5,332 08		5,332 08
	Clerk of the Peace....	" "			
	Local Registrar.....	b E. J. Lovelace.....	7,843 60	675 00	8,518 60
	County Court Clerk..	" "			
Surrogate Registrar..	" "				
MANITOULIN: Gore Bay.....	Sheriff.....	J. H. Fell.....	1,588 71	950 00	2,538 71
	Surrogate Judge.....	C. E. Hewson.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	W. F. McRae, K.C....	3,792 89	250 00	4,042 89
	Clerk of the Peace....	" "			
	Local Registrar.....	C. C. Platt.....	736 48	850 00	1,586 48
	District Court Clerk..	" "			
Surrogate Registrar..	" "				
MIDDLESEX: London.....	Sheriff.....	D. A. Graham.....	7,541 98		7,541 98
	Surrogate Judge.....	T. Macbeth.....	1,300 00		
	Local Master.....	H. S. Blackburn.....	1,469 75		
	Deputy Registrar.....	" "	193 60		1,663 35
	Crown Attorney.....	A. M. Judd.....	Commute	d at \$5,00	0.00 per
	Clerk of the Peace....	" "			
	Deputy Clerk of the Crown.....	c Edmund Weld.....	18,188 50	500 00	18,688 50
	County Court Clerk..	" "			
Surrogate Registrar..	" "				

a J. A. McCammon resigned. W. J. Manahan appointed as of Jan. 1st, 1930.

b Of the \$2,168.46 due by Mr. Lovelace, \$1,168.46 has been received.

c Of the amount of \$8,078.85 due by Mr. Weld, \$7,450 has been received.

the Province of Ontario for the year ending December 31, 1929.—Continued.

Total office disbursements	Net earnings of office	Statutory amount paid to Province	Net income of officer	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1,374 95	2,210 48		2,210 48				Leeds and Grenville.
			1,000 00				
1,186 93	274 50 5,517 44	1,008 72	274 50 4,568 72				
1,289 67	7,502 63	2,702 37	4,800 26		2,452 80	4,730 15	
281 05	1,818 48		1,818 48				Lennox and Addington.
			1,000 00	20 70			
810 68	2,913 62		2,913 62				
472 83	2,358 00		2,358 00		604 00	1,227 50	
1,337 14	3,989 93		3,989 93				Lincoln.
			1,000 00	52 70			
1,017 01	4,315 07	157 53	4,157 54				
1,609 20	6,909 40	2,168 46	4,740 94		2,173 40	2,606 50	
519 63	2,019 08		2,019 08				Manitoulin.
			1,000 00				
40 00	4,002 89	1 40	4,001 49				
	1,586 48		1,586 48		126 80	265 75	
1,957 05	5,584 93		5,584 93				Middlesex.
			1,300 00				
634 00	1,029 35		1,029 35				
annum.							
5,212 00	13,476 50	8,078 85	5,397 65		4,761 80	8,254 00	

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929	Salary paid by Province	Total earnings and salary in all offices
			\$ c.	\$ c.	\$ c.
MUSKOKA: Bracebridge...	Sheriff.....	J. G. Myers.....	1,470 45	1,350 00	2,820 45
	Surrogate Judge.....	A. A. Mahaffy.....		1,000 00	
	Local Master.....	" ".....			
	Crown Attorney.....	Thos. Johnson.....	2,365 84	250 00	2,615 84
	Clerk of the Peace.....	" ".....			
	Local Registrar.....	C. S. Salmon.....	1,953 40	600 00	2,553 40
	District Court Clerk..	" ".....			
NIPISSING: North Bay....	Sheriff.....	W. S. Wagar.....	4,077 81	800 00	4,877 81
	Surrogate Judge.....	J. A. Valin.....		1,000 00	
	Local Master.....	" ".....			
	Crown Attorney.....	T. E. McKee.....	4,060 54	250 00	4,310 54
	Clerk of the Peace.....	" ".....			
	Local Registrar.....	T. J. Bourke.....	3,570 45	600 00	4,230 45
	District Court Clerk..	" ".....			
NORFOLK: Simcoe.....	Sheriff.....	W. Tisdale.....	2,313 65		2,313 65
	Surrogate Judge.....	A. T. Boles.....		1,000 00	
	Local Master.....	" ".....			
	Crown Attorney.....	W. E. Kelly, K.C.....	Commuted	at \$3,400.00 per	
	Clerk of the Peace.....	" ".....			
	Local Registrar.....	H. P. Innes, K.C.....	4,742 88	675 00	5,417 88
	County Court Clerk..	" ".....			
NORTHUMBER- LAND AND DURHAM: Cobourg.....	Surrogate Registrar..	" ".....			
	Sheriff.....	D. J. Nesbitt.....	4,604 05		4,604 05
	Surrogate Judge.....	L. V. O'Connor.....		1,000 00	
	Local Master.....	" ".....			
	Crown Attorney.....	W. F. Kerr, K.C.....	8,019 85		8,019 85
	Clerk of the Peace.....	" ".....			
	Local Registrar.....	J. T. Field.....	7,845 30	750 00	8,595 30
ONTARIO: Whitby.....	County Court Clerk..	" ".....			
	Surrogate Registrar..	" ".....			
	Sheriff.....	J. F. Paxton.....	5,839 62		5,839 62
	Surrogate Judge.....	J. E. Thompson.....		1,000 00	
	Local Master.....	Judge Robt. Ruddy.....	294 95		
	Crown Attorney.....	J. A. McGibbon.....	7,236 42		7,236 42
	Clerk of the Peace.....	" ".....			
OXFORD: Woodstock...	Local Registrar.....	Horace Bastom.....	7,354 95	675 00	8,029 95
	County Court Clerk..	" ".....			
	Surrogate Registrar..	" ".....			
	Sheriff.....	Wm. McGhee.....	3,266 55		3,266 55
	Surrogate Judge.....	J. G. Wallace.....		1,000 00	
	Local Master.....	W. T. McMullen.....	45 50		
	Crown Attorney.....	R. N. Ball, K.C.....	5,395 15		5,395 15
WOODSTOCK:	Clerk of the Peace.....	" ".....			
	Local Registrar.....	P. McDonald.....	9,481 46	450 00	9,931 46
	County Court Clerk..	" ".....			
	Surrogate Registrar..	" ".....			

the Province of Ontario for the year ending December 31, 1929.—Continued.

Total office disbursements	Net earnings of office	Statutory amount paid to Province	Net income of officer	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
213 38	2,607 07		2,607 00				Muskoka.
			1,000 00	14 90			
140 00	2,475 84		2,475 84				
62 82	2,490 58		2,490 58		394 70	706 50	
							Nipissing.
2,084 36	2,793 45		2,793 45				
			1,000 00	8 70			
805 76	3,504 78		3,504 78				
693 98	3,546 47	118 24	3,418 23		652 80	634 00	
							Norfolk.
688 40	1,625 25		1,625 25				
			1,000 00	20 28			
annum.							
927 03	4,490 85	595 43	3,895 42		960 40	1,919 25	
							Northumberland and Durham.
1,411 52	3,192 53		3,192 53				
			1,000 00	65 20			
1,555 87	6,463 98	1,231 98	5,232 00				
972 00	7,623 30	2,810 70	4,812 60		1,900 40	3,629 00	
							Ontario.
1,216 10	4,623 52		4,623 52				
			1,000 00				
	294 95		294 95				
1,274 40	5,962 02	981 01	4,981 01				
973 91	7,056 04	2,300 44	4,755 60		2,508 20	2,882 00	
							Oxford.
1,329 54	1,937 01		1,937 01				
			1,000 00				
	45 50		45 50				
613 00	4,782 15	391 08	4,391 07				
2,233 10	7,698 36	2,878 52	4,819 84		2,489 40	3,812 40	

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929	Salary paid by Province	Total earnings and salary in all offices
			\$ c.	\$ c.	\$ c.
PARRY SOUND: Parry Sound..	Sheriff.....	J. E. Armstrong.....	2,897 82	750 00	3,647 82
	Surrogate Judge.....	F. R. Powell.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	W. L. Haight, K.C....	Commuted	at \$1,700.00	per
	Clerk of the Peace.....	" "			
	Local Registrar.....	F. Tasker.....	2,075 00	600 00	2,675 00
	District Court Clerk.....	" "			
PEEL: Brampton.....	Surrogate Registrar..	" "			
	Sheriff.....	N. Henderson.....	3,089 90		3,089 90
	Surrogate Judge.....	B. F. Justin.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	A. G. Davis.....	3,676 62		3,676 62
	Clerk of the Peace.....	" "			
	Local Registrar.....	J. R. Fallis.....	3,401 93	600 00	4,001 93
PERTH: Stratford.....	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
	Sheriff.....	M. F. Irvine.....	3,750 29		3,750 29
	Surrogate Judge.....	J. L. Killoran.....		1,000 00	
	Local Master.....	" "			
	Crown Attorney.....	G. G. McPherson, K.C.	6,238 21		6,238 21
	Clerk of the Peace.....	" "			
PETERBOROUGH: Peterborough..	Local Registrar.....	F. H. Thompson, K.C.	7,057 05	675 00	7,732 05
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
	Sheriff.....	F. J. A. Hall.....	3,446 56		3,446 56
	Surrogate Judge.....	C. S. Huycke.....		1,000 00	
	Local Master.....	O. A. Langley.....	139 90		
	Crown Attorney.....	V. J. McElderry.....	5,204 51		5,204 51
PRESCOTT AND RUSSELL: L'Original.....	Clerk of the Peace.....	" "			
	Local Registrar.....	G. J. Sherry.....	6,325 60	675 00	7,000 60
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
	Sheriff.....	S. W. Wright.....	2,051 26		2,051 26
	Surrogate Judge.....	A. Constantineau.....		1,000 00	
	Local Master.....	" "			
PRINCE EDWARD: Picton.....	Crown Attorney.....	F. W. Thistlethwaite, K.C.....	4,002 96		4,002 96
	Clerk of the Peace.....	" " "			
	Local Registrar.....	Jos. Belanger.....	3,169 05	675 00	3,844 05
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			
	Sheriff.....	D. J. Barker.....	1,955 72		1,955 72
	Surrogate Judge.....	E. H. McLean.....		1,000 00	
PRINCE EDWARD: Picton.....	Local Master.....	" "			
	Crown Attorney.....	M. R. Allison.....	3,538 86		3,538 86
	Clerk of the Peace.....	" "			
	Local Registrar.....	R. H. Hubbs.....	2,565 89	600 00	3,165 89
	County Court Clerk..	" "			
	Surrogate Registrar..	" "			

a G. G. McPherson resigned. H. B. Morphy appointed *pro tem*, Jan. 28th, 1930.

b V. J. McElderry appointed Dec. 18th, 1929, Mr. G. W. Hatton having died Oct. 12th, 1929.

c F. W. Thistlethwaite died Oct. 12th, 1929. S. A. V. Martin appointed *pro tem* until permanent appointment of C. W. A. Macdonald, Jan. 28th, 1930.

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929		Salary paid by Province		Total earnings and salary in all offices	
			\$	c.	\$	c.	\$	c.
RAINY RIVER: Fort Frances..	Sheriff	W. A. Baker.....	2,751	09	1,150	00	3,901	09
	Surrogate Judge.....	A. McLennan.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	N. L. Croome.....	3,437	05	250	00	3,687	05
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	W. P. Pilkey.....	2,066	72	600	00	2,666	72
	District Court Clerk..	" ".....						
	Surrogate Registrar..	" ".....						
RENFREW: Pembroke.....	Sheriff	Alex. Morris.....	2,919	95			2,919	95
	Surrogate Judge.....	J. T. Mulcahy.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	H. B. Johnson, K.C..	4,971	84			4,971	84
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	J. M. Beatty.....	3,390	50	600	00	3,990	50
	County Court Clerk..	" ".....						
	Surrogate Registrar..	" ".....						
SIMCOE: Barrie.....	Sheriff	D. H. MacLaren.....	3,713	66			3,713	66
	Surrogate Judge.....	aD. Ross.....			1,000	00		
	Local Master.....	F. G. Evans, K.C....		1 00			5,678	20
	Crown Attorney.....	" ".....	5,677	20				
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	John Mackay.....	2,774	25	750	00	3,524	25
	County Court Clerk..	" ".....						
	Surrogate Registrar..	E. A. Little.....	5,710	62			5,710	62
STORMONT, DUNDAS AND GLENGARRY: Cornwall.....	Sheriff	bW. R. Mack.....	3,503	15			3,503	15
	Surrogate Judge.....	cF. T. Costello.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	J. G. Harkness, K.C.	Commuted		at \$2,8		30.00	per
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	A. I. Macdonell.....	6,861	45	750	00	7,611	45
	County Court Clerk..	" ".....						
	Surrogate Registrar..	" ".....						
SUDBURY: Sudbury.....	Sheriff	A. Irving.....	6,123	07	1,150	00	7,273	07
	Surrogate Judge.....	dE. Proulx.....			1,000	00		
	Local Master.....	" ".....						
	Crown Attorney.....	eR. R. McKessock....	9,370	60	250	00	9,620	60
	Clerk of the Peace.....	" ".....						
	Local Registrar.....	A. H. Beath.....	4,024	38	600	00	4,624	38
	District Court Clerk..	" ".....						
	Surrogate Registrar..	" ".....						

a Judge Ross died Dec. 2nd, 1929.

b W. R. Mack died Jan. 18th, 1930.

c F. T. Costello appointed Surrogate Judge, Oct. 22nd, 1929, Judge O'Reilly having died April 23rd, 1929.

d E. Proulx appointed Surrogate Judge, Oct. 22nd, 1929, Judge Kehoe having died Nov. 5th, 1929.

e R. R. McKessock died Feb. 12th, 1930.

the Province of Ontario for the year ending December 31, 1929—Continued.

Total office disbursements		Net earnings of office		Statutory amount paid to Province	Net income of officer	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$	c.	\$	c.	\$	\$	\$	\$	\$	
1,153	77	2,747	32		2,747				Rainy River.
					1,000				
214	90	3,472	15		3,472				
859	66	1,807	06		1,807		454	255	Renfrew.
							10	25	
578	04	2,341	91		2,341				
					1,000				Simcoe.
719	00	4,252	84	126	4,126				
682	00	3,308	50	61	3,246		823	1,338	
				70	80		60	50	Stormont, Dundas and Glengarry.
2,634	31	1,079	35		1,079				
1,323	14	4,355	06	177	4,178				
				03	03				Sudbury.
494	50	3,029	75	6	3,023				
1,450	00	4,260	62	480	3,780		2,117	4,047	
				31	31		05	50	Sudbury.
475	99	3,027	16		3,027				
					1,000				
annum.						84			Sudbury.
1,459	20	6,152	25	1,487	4,665		1,742	2,392	
				03	22		70	50	
									Sudbury.
1,944	36	5,328	71		5,328				
					1,000				
3,594	00	6,026	60	1,013	5,013				Sudbury.
				30	30				
1,662	40	2,961	98		2,961		634	563	
							90	80	

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929		Salary paid by Province		Total earnings and salary in all offices
			\$	c.	\$	c.	
TEMISKAMING: Haileybury...	Sheriff.....	Geo. Caldbick.....	6,106	14	1,000	00	7,106 14
	Surrogate Judge.....	H. Hartman.....			1,000	00	
	Local Master.....	" "					
	Crown Attorney.....	F. L. Smiley K.C.....	4,628	57	250	00	4,878 57
	Clerk of the Peace.....	" "					
	Local Registrar.....	T. J. Meagher.....	3,511	24	600	00	4,111 24
	District Court Clerk.....	" "					
THUNDER BAY: Port Arthur...	Surrogate Registrar...	" "					
	Sheriff.....	N. Edmeston.....	7,795	49	1,400	00	9,195 49
	Surrogate Judge.....	M. J. Kenny.....			1,000	00	
	Local Master.....	" "					
	Crown Attorney.....	W. F. Langworthy, K.C.....	5,859	02	250	00	6,109 02
	Clerk of the Peace.....	" "					
	Local Registrar.....	Keith Munro.....	5,462	30	600	00	6,062 30
VICTORIA: Lindsay.....	District Court Clerk...	" "					
	Surrogate Registrar...	" "					
	Sheriff.....	R. J. Patterson.....	1,736	20			1,736 20
	Surrogate Judge.....	W. D. Swayze.....			1,000	00	
	Local Master.....	" "					
	Crown Attorney.....	J. E. Anderson.....	6,317	05			6,317 05
	Clerk of the Peace.....	" "					
WATERLOO: Kitchener.....	Local Registrar.....	A. T. Porter.....	3,440	86	675	00	4,115 86
	County Court Clerk...	" "					
	Surrogate Registrar...	" "					
	Sheriff.....	W. A. Kribs.....	4,448	78			4,448 78
	Surrogate Judge.....	aE. J. Hearn.....			1,000	00	
	Local Master.....	J. J. A. Weir.....	714	40			714 40
	Crown Attorney.....	D. S. Bowlby, K.C.....	7,791	30			7,791 30
WELLAND: Welland.....	Clerk of the Peace.....	" "					
	Local Registrar.....	C. C. Hahn.....	5,679	15	675	00	6,354 15
	County Court Clerk...	" "					
	Surrogate Registrar...	E. H. Scully.....	5,820	59			5,820 59
	Sheriff.....	V. L. Davidson.....	5,206	85			5,206 85
	Surrogate Judge.....	L. B. C. Livingstone.....			1,000	00	
	Local Master.....	" "					
WELLINGTON: Guelph.....	Crown Attorney.....	T. D. Cowper, K.C.....	6,024	81			6,204 81
	Clerk of the Peace.....	" "					
	Local Registrar.....	J. E. Cohoe.....	12,404	93	800	00	13,204 93
	County Court Clerk...	" "					
	Surrogate Registrar...	" "					
	Sheriff.....	G. H. Dickson.....	3,674	83			3,674 83
	Surrogate Judge.....	R. L. McKinnon.....			1,000	00	
WELLINGTON: Guelph.....	Local Master.....	L. W. Goetz.....	99	80	300	00	8,335 03
	Local Registrar.....	" "	7,935	23			
	County Court Clerk...	" "					
	Surrogate Registrar...	J. M. Kearns.....	Commuted		at \$3,450.00		per
	Crown Attorney.....	" "					
	Clerk of the Peace.....	" "					

a Judge Hearn died March 26th, 1929. E. W. Clement appointed Surrogate Judge Oct. 22nd.

the Province of Ontario for the year ending December 31, 1929.—Continued.

Total office disbursements	Net earnings of office	Statutory amount paid to Province	Net income of officer	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
2,173 97	4,932 17		4,932 17				Temiskaming.
			1,000 00	85 40			
957 98	3,920 59		3,920 59				
692 50	3,418 74	83 74	3,335 00		874 10	622 50	
4,327 12	4,868 37		4,868 37				Thunder Bay.
			1,000 00	22 40			
1,008 00	5,101 02	550 51	4,549 51				
534 50	5,527 80	1,113 90	4,413 90		537 60	1,023 05	
718 07	1,018 13		1,018 13				Victoria.
			1,000 00	36 40			
1,512 79	4,804 26	402 13	4,402 13				
1,638 61	2,477 25		2,477 25		743 60	1,217 25	
1,571 52	2,877 26		2,877 26				Waterloo.
			1,000 00				
	714 40		714 40				
990 00	6,801 30	1,400 65	5,400 65				
866 15	5,488 00	1,094 00	4,394 00				
1,324 03	4,496 56	598 28	3,898 28		2,706 25	5,045 25	
2,765 60	2,441 25		2,441 25				Welland.
			1,000 00	84 40			
1,165 00	4,859 81	429 90	4,429 91				
2,344 00	10,860 93	5,119 29	5,741 64		3,197 20	3,521 95	
1,251 64	2,423 19		2,423 19				Wellington.
			1,000 00				
1,292 62	7,042 41	2,198 35	4,844 06		2,181 40	3,500 75	
annum.							

Return of fees and emoluments of the Judicial Officers throughout

County or District	Office	Officer	Amount earned in 1929	Salary paid by Province	Total earnings and salary in all offices
WENTWORTH: Hamilton.....	Sheriff.....	Leeming Carr.....	\$ 12,201 01	c.	\$ 12,201 01
	Surrogate Judge.....	H. H. Carpenter.....	.....	1,000 00	.....
	Local Master.....	Judge W. T. Evans...	1,000 00	.....	.....
	Crown Attorney.....	G. W. Ballard, K.C....	Commute	d at \$5,000.00	per
	Clerk of the Peace....	" "	.....	.....	.....
	Local Registrar.....	G. T. Inch.....	24,608 22	750 00	25,358 22
	County Court Clerk..	" "	.....	.....	.....
	Surrogate Registrar...	" "	.....	.....	.....
YORK: Toronto.....	Sheriff.....	A. McCowan.....	26,223 73	.....	26,223 73
	Surrogate Judge.....	J. H. Denton.....	2,600 00	.....	.....
	" "	F. M. Morson.....	1,600 00	.....	.....
	" "	C. H. Widdifield.....	1,600 00	.....	.....
	" "	J. Tytler.....	1,000 00	.....	.....
	" "	D. O'Connell.....	1,000 00	.....	.....
	" "	W. T. J. Lee.....	1,000 00	.....	.....
	Crown Attorney.....	E. N. Armour, K.C....	Commute	d at \$7,500.00	per
Clerk of the Peace....	aH. E. Irwin, K.C....	29,099 17	.....	29,099 17	
County Court Clerk..	T. V. Gearing.....	47,158 80	.....	47,158 80	
Surrogate Registrar...	J. E. Thompson.....	51,864 74	.....	51,864 74	
TORONTO:	Sheriff.....	R. A. Pyne.....	57,168 09	.....	57,168 09

a Of the amount of \$7,554.39 due by Mr. Irwin, \$7,450.64 has been received.

the Province of Ontario for the year ending December 31, 1929—*Concluded.*

Total office disbursements	Net earnings of office	Statutory amount paid to Province	Net income of officer.	Amount of fees earned by Local Masters during the year	Fees collected in Law Stamps for the Crown	Fees collected in Law Stamps for the Judge	County or District
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
5,257 08	6,943 93	399 54	6,544 39				Wentworth.
			1,000 00				
annum.				35 30			
4,557 67	20,800 55	14,670 50	6,130 05		7,860 90	10,620 05	York.
14,365 58	11,858 15	4,822 35	7,035 80				
			2,600 00				
			1,600 00				
			1,000 00				
			1,000 00				
annum.			1,000 00				
9,897 89	19,201 28	7,554 39	11,646 89				
10,513 51	36,604 29	28,930 77	7,714 52				
7,748 16	44,116 61	35,654 93	8,461 65		39,507 30	76,966 05	
31,779 38	25,388 71	16,999 83	8,388 88				Toronto.

COMMUTED CROWN ATTORNEYS

County or District and address	Name	Gross earnings		Disburse- ments		Net earnings		Salary	
		\$	c.	\$	c.	\$	c.	\$	c.
DUFFERIN:									
Orangeville.....	R. D. Evans.....	†	1,939 28	*	901 04		1,038 24		1,270 00
ESSEX:									
Windsor.....	J. S. Allan.....	†	24,193 53		5,730 31		18,463 22		5,000 00
GREY:									
Owen Sound.....	T. H. Dyre.....	†	6,940 20		2,344 90		4,595 30		3,010 00
HURON:									
Goderich.....	D. Holmes.....	†	6,064 30	*	1,201 00		4,863 30		3,000 00
KENORA:									
Kenora.....	H. P. Cooke.....		2,206 00	†	150 00		2,056 00		1,970 00
MIDDLESEX:									
London.....	A. M. Judd.....		6,305 39	†	1,000 00		5,305 39		5,000 00
NORFOLK:									
Simcoe.....	W. E. Kelly.....		2,689 64	†	650 00		2,039 64		3,400 00
PARRY SOUND:									
Parry Sound.....	W. L. Haight.....		2,232 46	†	300 00		1,932 46		1,700 00
STORMONT, DUNDAS AND GLENGARRY:									
Cornwall.....	J. G. Harkness.....	†	4,566 74		671 21		3,895 53		2,830 00
WELLINGTON:									
Guelph.....	J. M. Kearns.....		6,970 80		754 56		6,216 24		3,450 00
WENTWORTH:									
Hamilton.....	G. W. Ballard.....		10,845 66		1,706 77		9,138 89		5,000 00
YORK:									
Toronto.....	E. N. Armour.....	§	41,226 96						7,500 00

†Election fees included in earnings and disbursements.

*Mr. Evans' disbursements include an allowance of \$130.00 in addition to commutation.

Mr. Holmes' disbursements include an allowance of \$500.00 in addition to commutation.

†Amount allowed in addition to commutation.

§Salaries of staff paid by Province direct; amount paid to Provincial Treasurer, \$33,726.96

Statement Respecting Registrars of Deeds

Statement showing the earnings, disbursements, net incomes, etc., of Registrars of Deeds for

No.	Registry Division	Where Office Situate	Registrar	Gross earnings
				\$ c.
1	Algoma	Sault Ste. Marie	H. J. Moorhouse	4,736 55
2	Brant	Brantford	Alex. Graham	6,820 20
3	Bruce	Walkerton	W. H. McFarlane	7,347 90
4	Carleton	Ottawa	A. E. Hunt	7,081 28
5	Cochrane	Cochrane	J. A. Clermont	a 9,740 57b
6	Dufferin	Orangeville	F. J. Patterson	2,580 60
7	Dundas	Morrisburg	R. J. Dillen	1,568 70
8	Durham East	Port Hope	R. H. Hodgson	1,756 90
9	Durham West	Bowmanville	Miss J. A. Pollard	2,161 20
10	Elgin	St. Thomas	J. H. Coyne	b 6,609 14
11	Essex	Sandwich	J. O. Reaume	45,280 80
12	Fort William	Fort William	C. W. Jarvis	b 7,885 35
13	Frontenac	Kingston	W. J. Gibson	5,842 60
14	Glengarry	Alexandria	J. A. McRae	2,181 76
15	Grenville	Prescott	W. S. Johnston	2,319 40
16	Grey, North	Owen Sound	Geo. P. Creighton	4,766 50
17	Grey, South	Durham	A. H. Jackson	3,196 45
18	Haldimand	Cayuga	W. H. Howard	3,800 25
19	Haliburton	Minden	A. W. Fleming	880 30
20	Halton	Milton	Victor Chisholm	5,629 30
21	Hastings	Belleville	R. J. S. Dewar	7,979 80
22	Huron	Goderich	Wm. Coats	6,530 84
23	Kenora	Kenora	Mrs. E. A. Cunningham	b 4,824 85
24	Kent	Chatham	J. B. Clark	12,020 65
25	Lambton	Sarnia	R. E. La Sœur	9,852 80
26	Lanark, North	Almonte	H. C. Bowland	1,476 30
27	Lanark, South	Perth	Jas. Armour	2,057 30
28	Leeds	Brockville	A. W. Gray	4,497 05
29	Lennox and Addington	Napanee	G. S. Reid	3,384 70
30	Lincoln	St. Catharines	H. W. Byrne, Acting	10,767 78
31	London	London	R. H. Dignan	7,270 55
32	Manitoulin	Gore Bay	C. C. Platt	b 1,610 60c
33	Middlesex, E. and N.	London	Miss M. V. Walker	7,420 80
34	Middlesex, West	Glencoe	R. Dunlop	2,001 35
35	Muskoka	Bracebridge	C. E. Lount	b 5,064 71
36	Nipissing	North Bay	J. M. Deacon	a 6,000 80b
37	Norfolk	Simcoe	W. M. McGuire	6,414 49
38	Northumberland, East	Colborne	A. G. Willoughby	2,752 64
39	Northumberland, West	Cobourg	Hugh McCullough	2,125 35
40	Ontario	Whitby	G. W. Dryden	13,496 75
41	Ottawa	Ottawa	J. T. Moxley	9,992 85
42	Oxford	Woodstock	W. L. MacWhinnie	8,130 20
43	Parry Sound	Parry Sound	C. Gillespie	2,388 10
44	Peel	Brampton	F. J. Jackson	5,962 40
45	Perth, North	Stratford	dJas. Steele	4,325 95
46	Perth, South	St. Mary's	G. D. L. Rice	1,974 05
47	Peterborough	Peterborough	W. F. Morrow	7,351 45
48	Port Arthur	Port Arthur	J. M. Munro	b 6,104 25
49	Prescott	L'Orignal	H. M. Mooney	2,521 75
50	Prince Edward	Pictou	J. H. Holmes	3,027 45
51	Rainy River	Fort Frances	W. J. Keating	b 4,170 59
52	Renfrew	Pembroke	R. A. Campbell	5,325 00
53	Russell	Russell	J. A. Gamble	2,261 45
54	Simcoe	Barrie	R. J. Sanderson	12,960 44
55	Stormont	Cornwall	J. C. Alquire	3,606 11
56	Sudbury	Sudbury	eS. Fournier	b 9,862 33
57	Temiskaming	Haileybury	Lorne H. Ferguson	a 9,454 84b
58	Toronto	Toronto	Thos. Crawford	g104,070 30

the year ending 31st December, 1929, and the sums payable under Section 101 of *The Registry Act*.

Disbursements	Net Income	Percentage under Sec. 101	Net for Registrar	INSTRUMENTS			No.
				Number registered	Number uncopied	Number copied but not compared	
\$ c.	\$ c.	\$ c.	\$ c.				
2,440 65	2,295 90		2,295 90	1,748	139		1
2,270 00	4,550 20	775 10	3,775 10	2,900			2
2,970 00	4,377 90	688 95	3,688 95	2,807			3
3,228 69	3,852 59	426 29	3,426 30	2,194			4
8,422 03	1,318 54		4,500 00	38			5
321 50	2,259 10		2,259 10	967			6
700 00	868 70		868 70	692			7
715 00	1,041 90		1,041 90	633			8
900 00	1,261 20		1,261 20	771	35		9
2,177 87	4,431 27	663 71	3,767 56	2,554			10
13,717 51	31,563 29	24,506 97	7,056 32	16,966	139		11
3,825 50	4,059 85	363 25	3,696 60	1,641			12
2,128 00	3,714 60	357 30	3,357 30	2,115	87	126	13
800 00	1,381 76		1,381 76	882			14
649 00	1,670 40		1,670 40	886	82		15
2,008 42	2,758 08		2,758 08	1,905			16
1,037 29	2,159 16		2,159 16	1,255			17
1,168 25	2,632 00		2,632 00	1,329			18
17 00	863 30		863 30	309			19
1,918 75	3,710 55	355 27	3,355 28	1,938			20
3,264 63	4,715 17	857 57	3,857 60	2,879	82		21
2,075 62	4,455 22	727 61	3,728 61	2,621			22
1,430 35	3,394 50	197 25	3,197 25	208			23
3,649 00	8,371 65	3,634 49	4,737 16	4,678			24
4,548 00	5,304 80	1,152 40	4,152 40	3,946	27	143	25
300 00	1,176 30		1,176 30	542	8		26
700 00	1,357 30		1,357 30	837			27
1,206 97	3,290 08	145 04	3,145 04	1,743			28
1,012 00	2,372 70		2,372 70	1,072			29
4,684 21	6,083 57	1,575 22	4,508 35	3,899	1,744	167	30
3,542 00	3,728 55	364 28	3,364 27	3,357	68	74	31
824 00	786 60		786 60	374	16	23	32
2,053 80	5,367 00	1,183 50	4,184 50	2,957			33
675 00	1,326 35		1,326 35	716	3		34
1,543 12	3,521 59	260 80	3,260 79	1,356	52		35
6,120 79	3,000 00	*	3,000 00	1,080			36
1,925 00	4,489 49	744 74	3,744 75	2,407			37
774 00	1,978 64		1,978 64	918			38
720 00	1,405 35		1,405 35	773	220		38
8,196 00	5,300 75	1,150 38	4,150 37	5,164		90	40
5,060 09	4,932 76	966 38	3,966 38	3,917			41
3,056 00	5,074 20	1,037 10	4,037 10	3,136			42
735 00	1,653 10		1,653 10	706			43
2,139 00	3,823 40	411 70	3,411 70	2,303	1 00		44
1,214 33	3,111 62	2 18	3,109 44	1,769		16	45
919 50	1,054 55		1,054 55	707	4	127	46
1,820 00	5,531 45	1,265 72	4,265 73	2,716	13	48	47
2,525 00	3,579 25	289 50	3,290 50	1,414			48
754 40	1,767 35		1,767 35	1,122			49
380 15	2,647 30		2,647 30	875	13	2	50
900 00	3,270 59	135 30	3,135 29	49	13		51
1,570 00	3,755 00		3,755 00	1,895	2	2	52
885 00	1,376 45		1,376 45	849	44		53
4,225 92	8,734 52	3,961 06	4,773 46	4,873			54
1,354 00	2,252 11		2,252 11	1,404			55
3,180 45	6,681 88	2,113 70	4,568 18	1,174			56
7,236 00	2,218 84		4,000 00	40			57
62,724 09	41,346 21		8,000 00	40,789			58

Statement showing the earnings, disbursements, net incomes, etc., of Registrars of Deeds for
—Con

No.	Registry Division	Where Office Situate	Registrar	Gross earnings
				\$ c.
59	Victoria.....	Lindsay.....	fC. D. Barr.....	3,680 90
60	Waterloo.....	Kitchener.....	O. S. Eby.....	12,390 00
61	Welland.....	Welland.....	E. E. Fraser.....	21,316 63
62	Wellington, North.....	Arthur.....	Jas. Tucker.....	2,572 60
63	Wellington, S. and C.....	Guelph.....	C. L. Nelles.....	6,680 40
64	Wentworth.....	Hamilton.....	R. K. Hope.....	35,104 91
65	York, East and West.....	Toronto.....	J. W. Mallon.....	51,789 42
66	York, North.....	Newmarket.....	R. L. Boag.....	4,911 75

a Officer and staff paid direct by Province. All fees sent to Inspector of Legal Offices.

b Land Titles Office fees included.

c Salary of \$600.00 included.

d Jas. Steele died Dec. 18th, 1929. M. Steele appointed Jan. 21st, 1930.

e S. Fournier died Feb. 11th, 1929; Miss A. Fournier, Deputy, acted until appointment of M. Brunette, July 12th, 1929.

f C. D. Barr died Dec. 22nd, 1929. J. R. Mark appointed Feb. 15th, 1930.

g The salaries and disbursements of Mr. Crawford and his staff deducted from fees of office.

* Deficit of \$119.99.

the year ending 31st December, 1929, and the sums payable under Section 101 of *The Registry Act*.
cluded

Disbursements	Net Income	Percentage under Sec. 101	Net for Registrar	INSTRUMENTS			No.
				Number registered	Number uncopied	Number copied but not compared	
\$ c.	\$ c.	\$ c.	\$ c.				
1,234 65	2,446 25	.....	2,446 25	1,402	82	27	59
5,150 90	7,239 10	2,615 20	4,623 90	5,374	.....	.....	60
9,087 09	12,229 54	7,106 59	5,122 95	7,822	149	50	61
1,131 50	1,441 10	.....	1,441 10	1,022	43	387	62
2,444 00	4,236 40	618 20	3,618 20	2,765	.....	.....	63
18,538 32	16,566 59	11,009 93	5,556 66	14,044	.....	.....	64
19,500 50	32,288 92	25,160 02	7,128 90	20,627	2,534	71	65
1,610 00	3,301 75	150 88	3,150 87	1,897	.....	.....	66

Statement Respecting Land Titles Offices

LOCAL MASTERS OF TITLES, PROVINCE OF ONTARIO, 1929

I.—Local Masters who are also Registrars of Deeds and who remit all fees to the Province and are paid salaries by the Province.

No.	Division	Where office situate	Name	Fees sent to Province	Salaries and disbursements paid by Province	Surplus after deducting disbursements
1	Cochrane.....	Cochrane.....	J. A. Clermont.....	\$9,740 57	\$8,422 03	\$1,318 54
2	Nipissing.....	North Bay.....	J. M. Deacon.....	6,000 80	6,120 79	Deficit of 119 99
3	Temiskaming.....	Haileybury.....	L. H. Ferguson.....	9,454 84	7,236 00	2,166 35

II.—Local Masters who are not Registrars of Deeds who take fees.

No.	Division	Where office situate	Name	Total fees earned	Disbursements	Net earnings
1	Ottawa.....	Ottawa.....	F. A. Magee.....	\$2,957 97	\$854 20	\$2,103 77
2	Parry Sound.....	Parry Sound.....	W. L. Haight.....	3,864 84	2,581 44	1,273 40
3	Whitby.....	Whitby.....	Judge Thompson.....	Nil.		

III.—Local Masters who are also Registrars of Deeds and who take fees.

No.	Division	Where office situated	Name	Gross earnings, L. T. O.	Gross earnings, Reg. Office	Total gross earnings	Disbursements	Net income	Percentage payable to Province	Net to officer
1	Fort William.....	Fort William.....	C. W. Jarvis.....	\$3,228 10	\$4,657 25	\$7,885 35	\$3,492 15	\$4,943 20	\$696 60	\$3,696 60
2	Kenora.....	Kenora.....	Mrs. E. A. Cunningham	4,284 40	540 45	4,824 85	1,430 35	3,394 50	197 25	3,197 25
3	Manitoulin.....	Goer Bay.....	C. C. Platt.....	*690 25	920 35	1,610 60	824 00	786 60	.....	786 60
4	Muskoka.....	Bracebridge.....	C. E. Lount.....	1,438 01	3,626 70	5,064 71	1,543 12	3,521 59	260 80	3,260 79
5	Rainy River.....	Fort Frances.....	W. J. Keating.....	4,064 41	106 18	4,170 59	900 00	3,270 59	135 30	3,135 29
6	Sudbury.....	Sudbury.....	S. Fournier.....	6,894 45	2,967 88	9,862 33	3,180 45	6,681 88	2,113 70	4,568 18
7	Port Arthur.....	Port Arthur.....	J. M. Munro.....	2,325 65	3,778 60	6,104 25	2,525 00	3,579 00	289 50	3,290 50
8	Elgin.....	St. Thomas.....	J. H. Coyne.....	103 85	6,505 29	6,609 14	2,177 87	4,431 27	663 71	3,767 56

†S. Fournier died Feb. 11th, 1929. M. Brunette appointed July 12th, 1929; Miss A. Fournier, Deputy, acted in meantime.

*Salary of \$600.00 paid by Province included.

IV.—Local Masters who are not Registrars of Deeds.

No.	Division	Where office situated	Name	Total fees earned	Salaries and disbursements	Remarks
1	Algoma.....	Sault Ste. Marie.....	V. MacNamara.....	\$1,684 39	\$3,355 00	Deficit of \$1,670 61
2	Toronto.....	Toronto.....	G. W. Holmes.....	42,838 30	39,281 32	

STATEMENT RE LOCAL MASTERS OF TITLES,

	Algoma	Cochrane	Elgin	Fort William	Kenora	Manitoulin
1 No. of applications for registration received.....			1	3		
2 No. of applications for registration entered.....			1	2		
3 No. of applications for registration pending.....			1	1		
4 No. of applications for registration returned.....	23					
5 No. of special applications received....		8		59	31	
6 No. of special applications completed..	22	7		54	31	
7 No. of special applications pending....	1	1		5		
8 No. of freehold patents received.....	72	246		32	102	11
9 No. of freehold patents entered.....	72	241		32	96	10
10 No. of freehold patents in course of entry.....		5			5	1
11 No. of freehold patents returned unentered.....					1	
12 No. of mining or other lease patents received.....	2				2	2
13 No. of mining or other lease patents entered.....	2				2	1
14 No. of mining or other lease patents in course of entry.....						1
15 No. of mining or other lease patents returned unentered.....						
16 Orders-in-Council granting land.....		1				
17 Orders-in-Council entered.....		1				
18 Land certificates on hand awaiting delivery.....	8	61		2	6	1
19 Land certificates delivered to patentees	64	231		30	90	10
20 Office copies of leases delivered.....					2	1
21 Office copies of leases undelivered....		1				1
22 No. of transfers registered.....	190	885	3	259	446	9
23 No. of other instruments registered...	160	1,088	6	365	258	12
24 No. of transmission applications.....	25	72	1	18	25	
25 No. of sales proceeding applications...		4		1		
26 Total amount of assurance fees collected.....	\$ c. 182 04	\$ c. 563 04	\$ c. 4 75	\$ c. 135 78	\$ c. 105 75	\$ c. 21 10
27 Total fees earned.....	1,684 39	9,683 51	103 85	3,228 10	4,284 40	90 25
Total assurance fees paid during the year in all offices.....	\$3,574 21					

PROVINCE OF ONTARIO, 1929

Muskoka	Nipissing	Ottawa	Parry Sound	Port Arthur	Rainy River	Sudbury	Temiskaming	Toronto	Whitby
		1	1	2	6				
		2	1	2	6			14	
		3						2	
					21				
	262		50	18	20	13	8		
	262		50	18	20	13	3	41	
					1		5		
10	37		50	38	39	197	389		
10	37		50	38	39	197	389		
3	18			2	2	12	72		
3	18			2	2	12	68		
							4		
							2		
							2		
3	2	30	2	3	7	3	27		
7	35		48	35	32	194	362		
	17			2		10	62		
3	1				2	3	10		
213	303	278	340	197	490	646	739	3,397	
156	866	493	206	199	421	1,133	1,263	8,601	
24	36	21		8	42	55		48	
	4		3	1	5	3		307	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
74 81	119 21	21 35	119 56	282 17	100 84	320 41	842 23	681 17	*
1,438 01	3,542 30	2,957 97	3,864 84	2,325 65	4,064 41	6,894 45	9,402 35	42,838 30	

Statement Respecting Division Courts

Return of Division Court business from the 1st day of January to the 31st day of December, A. D. 1929, inclusive, showing:—

Name of County, United Counties, or District	Number of Divisions	Number of suits entered in Court, exclusive of Transcripts of Judgments and Judgment summonses.	Amount of claims entered, exclusive of Transcripts of Judgments and Judgment summonses	Balance of Cash in Court from the previous year.		Total amount of Suits Money paid into Court		Total amount paid out of Court		Balance of Cash in Court.		Surplus Fees payable to the Hon. the Provincial Treasurer		Clerks' Returns of Emoluments		Bailiffs' Returns of Emoluments		Unclaimed moneys
				\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	
ALGOMA	1	1,283	71,664 79	185 39	32,797 57	32,688 02	294 94	296 14	4,155 65	2,763 53								
	2	39	1,939 72		1,140 61	1,083 61	57 00		118 25	133 90								
	3	47	5,635 03		1,880 72	1,880 72			270 80	215 89								
	6	72	2,001 52		1,743 96	1,743 96			136 41	158 05								
	7	627	15,905 58	130 15	15,986 08	16,040 58	75 65		925 50	260 20								
	1	1,045	65,618 16	386 74	27,029 95	26,851 20	565 49	182 14	3,773 80	2,175 00								
	2	176	6,796 37	170 01	3,565 08	3,128 42	606 67		451 60	447 21								
BRANT	3	7	2,783 27		2,488 31	2,264 31	224 00		166 35	184 69								
	4	65	3,144 61	15 00	2,312 02	2,327 02			286 10	159 25								
	5	17	839 09		699 17	699 17			71 10	63 33								
	1	150	3,172 01		2,865 79	2,865 79			611 75	506 51								
	2	109	7,893 65		3,039 10	3,039 10			551 90	148 33								
	3	165	7,591 00	479 05	3,971 88	3,144 18			653 28	391 00								
	4	58	2,602 91		1,845 11	1,845 11			178 93	124 62								
BRUCE	5	83	4,068 33	19 50	2,291 26	2,230 05	80 71		316 50	257 90								
	7	37	2,203 49		1,328 02	1,297 34	30 68		155 35	67 05								
	8	181	11,105 34	89 83	4,786 77	4,825 07	51 53		699 81	370 74								
	9	35	2,637 24		1,540 63	1,540 63			170 86	99 80								
	10	16	766 92		807 06	807 06			82 31	115 90								
	11	95	5,622 84	7 50	4,202 78	4,210 28			287 35	220 90								
	12	142	6,189 47		2,094 55	2,094 55			300 75	176 32								
	1	3,776	224,977 68	1,842 82	38,942 80	39,491 15	1,294 47	563 98	15,619 45	9,639 78	18 88							
	2	35	2,163 11		1,105 18	1,105 18			133 10	142 80								
	3	70	5,345 17		4,278 37	4,262 07	16 30		6,664 59	278 95								
	4	47	3,467 53		2,423 81	2,423 81				178 60	378 04							
	5	26	1,492 11	14 85	1,728 83	1,728 83	14 85			116 00	144 95							
6	90	7,815 29		4,325 25	4,299 27	25 98			350 00	225 00								
7	1,622	52,521 37	7 00	10,606 14	10,489 16	123 98		599 27	5,164 25	3,220 15								

COCHRANE.....										
1	480	34,773 18	150 12	16,468 61	16,500 43	118 30	2,155 85	1,956 95		
2	1,486	70,087 60	2,115 72	36,140 02	36,700 28	1,555 46	5,053 45	3,933 08	11 80	
3	136	10,025 42	30 00	8,430 35	8,053 74	406 61	516 80	638 37		
4	424	35,013 12	1,033 01	17,200 92	17,063 70	1,170 23	1,755 02	1,683 24		
5	159	12,665 92	148 10	6,269 04	6,140 20	276 94	709 35	546 05		
6	354	13,598 01	66 90	5,644 77	5,535 60	172 75	946 36	964 00		
DUFFERIN.....										
1	277	14,120 94	120 80	6,425 41	6,079 40	466 81	959 75	695 48		
2	164	11,296 00		7,272 95	7,272 95		491 37	494 37		
5	53	4,344 57		2,589 56	2,358 95	230 61	235 73	145 32		
ELGIN.....										
1	449	25,827 53		15,031 41	15,031 41		1,871 00	1,572 59		
2	12	819 66	44 00	662 32	706 32		91 25	87 26		
3	703	37,250 30		16,194 37	16,194 37		2,761 85	1,584 52		
4	133	10,144 07	43 25	4,765 43	4,768 48	40 20	407 20	677 12		
Essex.....										
1	580	34,731 64	19 40	12,126 67	12,051 60	94 47	1,600 00	1,074 10		
2	319	15,254 35		8,298 61	8,298 61		927 60	371 91		
3	258	21,591 81	171 01	6,836 81	6,444 67	563 15	1,134 05	643 22		
4	144	12,386 46	23 00	5,457 07	5,457 07	23 00	761 40	621 16		
5	386	44,356 41	86 90	18,804 61	18,468 27	423 24	1,970 50	1,402 50		
6	110	9,146 97		2,178 75	2,178 75		540 36	253 07		
7	3,825	274,469 26	860 65	55,393 20	54,925 60	1,328 25	20,251 12	10,510 38		
8	317	29,704 09	238 41	15,867 30	15,940 25	165 46	1,938 15	1,722 82		
9	66	6,929 39	8 13	3,583 91	3,484 64	107 40	411 30	284 80		
10	5	289 96		24 00	24 00		8 00	14 00		
11		New di vision.								
FRONTENAC.....										
1	889	52,134 84	124 54	22,242 34	22,208 54	158 34	3,415 39	1,828 91		
3	249	601 29		366 27	366 27		82 85	70 00		
4	58	2,277 62	254 95	1,269 00	1,489 35	34 60	333 04	246 75		
6	64	3,514 80	33 42	993 56	991 98	35 00	282 90	168 14		
7	17	697 09		321 04	321 04		81 13	45 37		
GREY.....										
1	761	23,915 07		12,296 67	12,296 67		2,406 80	1,202 38		
2	89	4,987 44		1,098 21	1,098 21		213 86	218 40		
3	204	10,061 30	102 50	4,548 12	4,613 99	36 63	691 95	320 40		
4	102	9,522 92	200 00	4,382 25	4,166 94	215 31	499 90	356 26		
5	88	6,750 05		3,500 00	3,500 00		463 90	580 66		
6	62	3,274 90		2,555 75	2,505 25	50 50	200 70	262 43		
7	246	11,174 11	188 61	2,429 92	2,598 75	19 78	640 85	450 00		
8	91	5,506 49	98 44	2,220 43	2,084 07	234 80	374 00	325 00		

Return of Division Court business from the 1st day of January to the 31st day of December A.D. 1929, inclusive, showing:—Continued

Name of County, United Counties, or District	Number of Divisions	Number of suits entered in Courts, exclusive of Transcripts of Judgments and Judgment summonses.	Amount of claims entered, exclusive of Transcripts of Judgments and Judgment summonses	Balance of Cash in Court from the previous year.		Total amount of Sutors' Money paid into Court		Total amount of Sutors' Money paid out of Court		Balance of Cash in Court.		Surplus Fees payable to the Hon. the Provincial Treasurer		Clerks' Returns of Emoluments		Balliffs' Returns of Emoluments		Unclaimed moneys			
				\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.
HALDIMAND.....	1	124	7,391 87	987 31	2,814 92	3,127 55	674 68	483 59	350 00	483 59	350 00	674 68	483 59	350 00	483 59	350 00	674 68	483 59	350 00		
	2	43	3,448 40	19 30	1,373 28	1,373 50	10 00	96 80	56 75	96 80	56 75	10 00	96 80	56 75	96 80	56 75	10 00	96 80	56 75		
	3	249	14,313 67	47 48	3,891 58	3,872 46	66 60	741 35	486 70	741 35	486 70	66 60	741 35	486 70	741 35	486 70	66 60	741 35	486 70		
	4	63	4,835 54	47 71	2,818 89	2,846 60	20 00	208 74	301 14	208 74	301 14	20 00	208 74	301 14	208 74	301 14	20 00	208 74	301 14		
	5	9	367 80		278 95	278 95			53 80	49 40	53 80			53 80	49 40	53 80			53 80	49 40	
HALIBURTON.....	1	28	2,125 11		1,290 46	1,290 46		111 08	102 15	111 08			111 08	102 15	111 08			111 08	102 15		
	2	165	7,386 66		3,700 42	3,700 42		583 85	178 25	583 85			583 85	178 25	583 85			583 85	178 25		
	3	54	3,031 94		1,097 30	1,097 30		190 24	105 82	190 24			190 24	105 82	190 24			190 24	105 82		
	4	No business.																			
HALTON.....	1	125	10,543 22		3,880 82	3,880 82		536 95	398 60	536 95			536 95	398 60	536 95			536 95	398 60		
	2	306	7,471 76		4,134 39	4,066 15	68 24	954 82	347 70	954 82	68 24		954 82	347 70	954 82	68 24		954 82	347 70		
	3	272	14,558 52	181 10	8,184 76	8,092 62	273 24	998 33	437 74	998 33	273 24		998 33	437 74	998 33	273 24		998 33	437 74		
	4	97	6,243 48	190 23	2,820 60	2,932 82	148 51	407 70	211 20	407 70	148 51		407 70	211 20	407 70	148 51		407 70	211 20		
	5	Vacant.																		
	6	299	17,682 88	10 00	9,325 59	9,330 59	5 00	1,162 16	580 65	1,162 16	5 00			1,162 16	580 65	1,162 16			1,162 16	580 65	10 00
HASTINGS.....	1	779	59,884 23	718 34	18,597 06	18,438 25	877 15	3,608 48	1,738 64	3,608 48	132 54		3,608 48	1,738 64	3,608 48	132 54		3,608 48	1,738 64		
	2	113	4,765 68	57 10	2,007 37	1,924 91	139 56	411 82	530 24	411 82			411 82	530 24	411 82			411 82	530 24		
	3	7	291 05		319 59	319 59		18 89	15 00	18 89			18 89	15 00	18 89			18 89	15 00	3 25	
	4	126	5,031 83	117 27	2,809 93	2,909 88	17 32	366 21	550 00	366 21			366 21	550 00	366 21			366 21	550 00		
	5	Vacant.																		
	6	175	9,420 11	163 79	4,483 77	4,561 78	85 78	643 60	566 55	643 60	85 78			643 60	566 55	643 60			643 60	566 55	
	7	57	1,634 08	3 00	893 07	869 27	26 80	209 81	43 19	209 81	26 80			209 81	43 19	209 81			209 81	43 19	
	8	157	5,535 40		3,558 62	3,558 62		491 28	282 82	491 28				491 28	282 82	491 28			491 28	282 82	
	9	344	11,755 17	438 72	4,966 11	5,012 37	392 47	1,018 10	758 89	1,018 10	392 47			1,018 10	758 89	1,018 10			1,018 10	758 89	
	10	87	4,701 55	213 84	4,263 61	4,477 45		373 15	212 90	373 15				373 15	212 90	373 15			373 15	212 90	
	11	18	828 27		295 63	295 63		59 05	183 48	59 05				59 05	183 48	59 05			59 05	183 48	
	12	175	8,757 65	168 00	4,754 83	4,902 83	20 00	504 26	428 73	504 26	20 00			504 26	428 73	504 26			504 26	428 73	

INSPECTOR OF LEGAL OFFICES FOR 1929

HURON	1	330	17,636 00	.....	8,743 68	8,677 88	65 80	.....	1,126 46	452 75
	2	220	11,761 22	185 97	4,208 00	4,129 39	264 58	.....	784 40	650 00
	3	76	6,677 00	.....	2,622 70	2,622 70	.....	.....	303 73	162 50
	4	127	7,603 82	21 00	4,964 93	4,985 93	.....	.....	472 65	385 15
	5	218	12,663 38	6 00	5,992 73	5,910 53	88 20	.....	670 55	572 94
	6	25	1,487 42	400 77	716 60	1,037 17	80 20	.....	97 20	97 35
	7	14	565 00	.....	162 24	162 24	.....	.....	43 80	43 00
	8	93	4,081 85	.....	2,046 59	1,991 24	55 35	.....	276 50	344 70
	9	48	5,856 74	.....	4,991 16	4,991 16	.....	.....	192 93	249 90
	10	52	2,950 33	25 16	1,724 34	1,744 09	5 41	.....	132 60	188 76
	11	68	4,495 19	30 00	2,210 79	2,221 79	19 00	.....	227 59	269 55
	12	45	2,757 65	.....	1,654 83	1,654 83	.....	.....	204 26	128 73
KENORA	1	268	15,432 81	685 50	6,691 39	6,717 56	659 33	.....	1,503 52	399 15
	3	87	6,522 58	172 35	3,055 32	2,767 55	460 12	.....	375 95	280 03
	4	78	5,132 38	436 04	2,133 15	2,183 46	385 73	.....	248 70	115 45
KENT	1	770	47,847 00	2,241 43	16,995 46	16,848 62	2,388 27	32 20	3,161 18	1,229 48
	2	236	15,581 88	50 47	8,894 88	8,719 14	226 21	.....	1,026 70	792 20
	3	154	7,798 43	320 90	5,275 05	5,444 13	151 82	.....	666 89	523 73
	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
	5	302	18,367 77	534 13	8,695 79	9,078 35	151 57	.....	1,256 20	662 00
	6	84	6,763 23	.....	2,126 11	2,126 11	.....	.....	150 09	313 95
	7	247	18,873 29	76 00	7,682 36	7,566 83	141 53	.....	1,045 95	758 53
LAMBTON	1	1,337	80,452 41	324 98	22,295 31	22,090 86	529 43	303 12	4,177 04	2,118 20
	2	78	4,435 15	8 42	2,689 29	2,582 50	113 21	.....	254 22	210 57
	3	16	1,019 27	32 50	655 71	688 21	.....	.....	53 50	109 70
	4	20	1,595 92	.....	711 35	711 35	.....	.....	115 13	66 17
	5	58	5,800 00	.....	2,607 08	2,607 08	.....	.....	175 44	150 61
	6	117	4,566 43	.....	1,478 88	1,478 88	.....	.....	288 17	178 00
	8	213	11,945 36	457 33	3,871 30	4,037 32	291 31	.....	878 03	335 00
	9	44	3,832 09	.....	1,747 23	1,747 23	.....	.....	130 27	212 82
LANARK	1	330	13,718 85	193 73	7,032 15	7,040 38	185 50	.....	1,362 95	763 35
	2	51	2,154 31	39 24	2,150 01	2,146 83	42 42	.....	172 50	250 00
	3	201	7,600 76	150 79	3,045 45	2,984 30	62 15	.....	514 60	452 79
	4	512	23,763 31	75 78	12,879 74	12,865 78	90 24	.....	1,886 95	991 01
	5	87	5,139 75	.....	3,344 60	3,344 60	.....	.....	290 45	233 79
LEEDS AND GRENVILLE	1	549	22,038 90	148 10	10,931 53	10,936 40	143 23	.....	1,738 01	823 65
	2	287	11,513 66	218 32	4,708 68	4,590 39	336 61	.....	893 25	649 28
	3	114	6,856 45	228 50	919 47	923 72	224 25	.....	436 40	243 85
	4	113	5,857 03	61 72	2,558 66	2,596 70	23 80	.....	495 60	319 10
	5	89	3,780 62	14 50	2,000 13	1,906 13	108 50	.....	218 85	138 75

Return of Division Court business from the 1st day of January to the 31st day of December, A. D. 1929, inclusive, showing:—Continued

Name of County, United Counties, or District	Number of Divisions	Number of suits entered in Court, exclusive of Transcripts of Judgments and Judgment summonses.	Amount of claims entered, exclusive of Transcripts of Judgments and Judgment summonses	Balance of Cash in Court from the previous year.		Total amount of Suits' Money paid into Court		Total amount of Suits' Money paid out of Court		Balance of Cash in Court.		Surplus Fees payable to the Hon. the Provincial Treasurer		Clerk's Returns of Emoluments		Bailiff's Returns of Emoluments		Unclaimed moneys	
				\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.		\$
LEEDS AND GRENVILLE—Con.	6	142	9,006 56			5,453 25	5,453 25							639 65	706 19				
	7	29	2,295 67			1,449 12	1,449 12			5 00				122 14	133 90				
	8	76	4,874 86			1,868 99	1,868 99							356 39	389 53				
	9	70	3,744 50			2,083 72	2,083 72							249 75	244 90				
	10	32	1,795 32			849 59	849 59							97 03	75 00				
	11	26	1,755 01			1,028 33	1,028 33							93 00	60 90				
	12	56	3,885 18			1,086 18	1,086 18							202 81	219 00				
	LENOX AND ADDINGTON.	1	315	12,154 13		8 09	4,383 71	4,383 71			8 09				975 00	736 70			
		2	33	1,305 50			797 62	797 62							102 44	137 28			
		3	28	2,258 81			933 96	933 96							99 00	74 30			
		4	10	238 45			121 35	121 35							33 25	4 70			
		5	25	1,073 69			447 65	447 65							82 00	52 60			
6		24	1,362 13		1 00	325 19	250 31			74 88				78 15	62 10				
7		40	1,398 03			811 43	782 92			28 51				135 48	120 00				
8		53	3,126 04			677 32	677 32							167 25	163 55				
9		2	34 10			19 00	19 00							6 50	18 25				
LINCOLN.	1	50	3,577 17			2,202 00	2,202 00							216 77	124 35				
	2	1,181	67,298 35		333 79	25,437 39	25,503 20			267 98				4,907 53	2,759 86			2 00	
	3	126	4,535 67			2,821 76	2,810 45			11 31				361 07	349 60				
	4	53	42,226 26		108 54	2,639 80	2,443 19			35 15				338 60	305 32				
	5	166	9,556 03		205 64	4,852 83	4,744 34			314 13				624 55	393 79				
MANITOULIN.	1	32	2,239 18			1,287 80	1,287 80							91 45	222 98				
	2	51	2,286 66			1,314 23	1,314 23							152 90	94 25				
	3	6	419 51		2 50	96 75	99 25							53 15	53 15				
MIDDLESEX.	1	2,020	120,952 26		2,274 65	44,184 37	43,572 41			2,886 61				7,563 20	3,413 77			7 58	
	2	196	14,757 45			7,359 91	7,329 19			30 72				555 10	549 18				
	3	113	4,675 26		33 50	2,296 18	2,309 68			20 00				286 56	175 00				

4	53	4,220 73	1,801 71	1,801 71	1,801 71	224 14	260 94
5	69	5,031 74	2,392 27	2,360 52	2,360 52	402 95	286 45
6	157	9,273 21	3,913 06	3,773 55	3,773 55	428 99	246 20
7	66	4,719 73	2,523 87	2,783 32	2,783 32	240 22	197 66
8	30	1,336 60	1,096 06	1,096 06	1,096 06	127 88	192 40
9	1,099	43,598 67	14,467 66	14,989 36	14,989 36	3,172 95	1,701 16
1	144	9,530 44	4,041 84	4,041 84	4,041 84	577 95	279 55
2	38	2,001 31	1,086 76	1,159 25	1,159 25	215 74	153 15
3	215	7,861 59	3,515 09	3,506 45	3,506 45	745 30	398 80
1	216	11,978 13	4,317 73	4,632 80	4,632 80	710 06	624 45
2	55	3,372 58	1,661 35	1,872 71	1,872 71	198 80	299 95
3	743	41,012 68	9,099 42	8,843 63	8,843 63	3,178 05	1,953 81
1	643	32,529 07	12,235 71	13,182 60	13,182 60	2,231 53	2,001 48
2	103	5,874 67	2,350 12	2,350 12	2,350 12	373 75	257 58
3	13	567 43	464 80	464 80	464 80	78 65	28 00
4	84	5,768 14	2,105 43	2,152 93	2,152 93	266 53	201 19
5	36	1,371 26	1,229 07	1,221 07	1,221 07	152 47	117 50
6	174	8,214 74	3,351 04	3,120 24	3,120 24	553 06	619 89
7	37	1,436 05	279 82	279 82	279 82	149 85	105 00
8	62	3,863 82	1,668 92	1,617 61	1,617 61	181 46	99 84
1	191	9,259 59	3,827 64	3,894 62	3,894 62	712 36	301 55
2	47	3,537 88	1,680 60	1,705 27	1,705 27	244 96	207 00
3	247	14,595 97	6,107 13	5,992 51	5,992 51	976 24	575 14
4	104	8,566 60	2,958 86	2,958 86	2,958 86	416 67	267 50
5	407	16,647 53	8,328 95	8,289 09	8,289 09	1,131 71	651 60
6	26	2,568 76	1,096 36	1,032 23	1,032 23	156 94	118 25
7	104	4,886 57	2,082 79	2,019 81	2,019 81	399 67	306 75
8	148	9,078 87	2,414 19	2,314 29	2,314 29	580 25	339 10
9	65	4,013 17	1,665 28	1,677 28	1,677 28	227 33	218 89
10	24	983 04	612 21	612 21	612 21	84 62	106 40
11	125	10,927 23	6,371 86	6,408 82	6,408 82	829 30	435 54
1	1,240	67,097 15	19,531 91	20,184 88	20,184 88	4,959 25	3,556 97
2	62	4,419 25	1,852 69	1,886 29	1,886 29	218 90	345 22
3	168	10,822 12	3,659 00	3,493 90	3,493 90	665 75	329 10
4	72	4,317 58	2,034 37	1,991 77	1,991 77	345 15	199 40
5	34	1,818 69	460 25	460 25	460 25	129 49	88 54
6	53	4,438 24	1,400 08	1,400 08	1,400 08	238 29	106 05
7	66	3,989 55	2,923 93	2,918 35	2,918 35	260 95	118 58
8	249	21,252 26	4,637 55	3,019 91	3,019 91	1,462 24	459 56

NORTHUMBERLAND AND DURHAM

ONTARIO

Return of Division Court business from the 1st day of January to the 31st day of December, A. D. 1929, inclusive, showing:—Continued

Name of County, United Counties, or District	Number of Divisions	Number of suits entered in Court, exclusive of Transcripts of Judgments and Judgment summonses.	Amount of claims entered, exclusive of Transcripts of Judgments and Judgment summonses	Balance of Cash in Court from the previous year.		Total amount of Suits' Money paid into Court.		Total amount of Suits' Money paid out of Court.		Surplus Fees payable to the Hon. the Provincial Treasurer	Clerks' Returns of Emoluments		Barristers' Returns of Emoluments		Unclaimed moneys.
				\$	c.	\$	c.	\$	c.		\$	c.	\$	c.	
OXFORD	1	598	33,353 50	67 07	16,188 90	16,235 17	20 70	2,159 80	989 22						
	2	70	7,255 74	90 47	2,815 54	2,827 81	78 20	327 57	182 10						
	3	25	800 00		500 00	500 00			75 00						
	4	114	6,751 55	312 99	5,495 35	5,786 04	22 30		522 65						
	5	538	17,018 41	678 91	11,317 84	11,739 18	257 57		1,563 99						
	6	237	14,990 94		6,617 94	6,618 94			839 15						
	7	57	4,489 33		3,083 48	3,083 48			264 98						
PARRY SOUND	1	351	19,277 23	714 37	6,497 51	6,326 76	885 12	1,199 99	826 11						
	2	22	875 58		593 99	593 99			78 17						
	3	13	908 26	56 00	858 75	866 80	48 00		50 25						
	4	74	3,841 01	197 59	1,745 58	1,870 92	72 25		245 00						
	5	Vacant													
	6	87	5,664 57		1,471 51	1,471 51			316 90						
	7	122	6,129 75		3,411 38	3,401 38	10 00		432 80						
PEEL	1	281	16,046 26		5,316 35	5,316 35			782 11						
	2	220	11,961 48		4,092 84	4,092 84			499 43						
	3	94	5,607 69	85 50	3,377 87	3,463 37			372 07						
	4	28	1,946 51		854 50	854 50			131 75						
PERTH	1	887	39,450 29	223 53	15,005 23	14,795 72	433 04	3,019 70	1,613 52						
	2	185	14,966 63		6,166 97	6,166 97			649 30						
	3	374	23,679 89	7 03	10,692 97	10,647 96	45 01		1,124 50						
	4	5	252 79		231 10	199 15	31 95		23 00						
	5	82	5,367 23		2,900 33	2,727 68	172 65		204 20						
	6	489	33,945 90	1 72	21,471 63	21,473 35			2,009 15						
PETERBOROUGH	1	952	51,020 37	95 73	21,051 43	21,094 21	52 95	3,586 07	2,175 31						
	2	91	5,036 87	63 18	1,951 47	1,980 20	34 45	277 93	83 40						
	3	54	3,373 92	5 50	1,885 11	1,856 84	33 77	90 75	86 00						

	4	40 80	552 45	552 45	552 45	14 44	20 65
	5	3,470 08	2,640 22	2,640 22	2,544 33	412 84	280 17
	6	270 75	110 75	110 75	110 75	16 23	15 15
PRESCOTT AND RUSSELL	1	915 49	321 61	321 61	307 66	84 30	35 70
	2	5,403 83	3,271 79	3,271 79	3,271 79	460 37	299 66
	3	1,095 10	525 99	525 99	525 99	60 35	40 70
	4	6,705 69	1,897 30	1,897 30	1,897 30	414 40	418 52
	5	1,363 44	600 20	600 20	609 20	94 69	137 20
	6	13,198 07	7,189 11	7,189 11	7,189 11	658 30	470 01
	7	18,218 23	6,526 83	6,495 78	6,495 78	1,367 35	727 82
	8	7,087 31	2,922 84	2,922 84	2,922 84	442 17	408 42
	9	2,710 82	909 50	909 50	909 50	199 70	143 28
	10	2,982 88	1,958 49	1,929 38	1,929 38	200 32	223 08
	11	4,409 10	1,607 53	1,607 53	1,633 83	272 61	251 40
PRINCE EDWARD	1	14,038 60	5,904 38	5,904 38	4,894 80	883 90	526 65
	2	4 00	4 00	4 00	4 00	3 26	9 95
	3	132 07	113 53	113 53	113 53	9 50	10 90
	4	447 93	36 95	36 95	50 69	64 00	65 40
	5	3,792 00	2,187 34	2,187 34	2,187 34	260 25	196 64
	6	651 32	373 31	373 31	373 31	47 80	42 25
	7	857 90	496 78	496 78	496 78	96 60	83 00
	8	215 00				11 04	
RAINY RIVER	1	19,505 74	9,797 09	9,797 09	9,690 69	1,347 52	689 70
	2	1,950 91	451 60	451 60	402 60	127 05	72 00
	3	6,917 64	1,506 94	1,506 94	1,562 62	227 70	376 20
RENREW	1	28,122 77	11,044 17	11,044 17	11,525 26	1,850 23	1,357 16
	2	1,469 50	532 04	532 04	532 04	92 55	104 35
	3	32,089 34	9,900 08	9,900 08	9,760 28	2,239 74	1,339 84
	4	21,559 59	9,583 05	9,583 05	9,689 12	1,726 25	809 62
	5	3,624 10	1,704 68	1,704 68	1,704 68	219 25	318 74
	6	2,472 01	837 06	837 06	837 06	198 75	138 05
	7	11,001 94	4,167 80	4,167 80	4,188 75	452 16	469 69
SIMCOE	1	23,201 00	17,431 01	17,431 01	17,094 56	2,307 20	1,890 24
	2	7,652 51	2,845 63	2,845 63	2,936 50	433 45	235 50
	3	6,228 56	4,085 08	4,085 08	4,091 43	374 35	310 54
	4	10,457 55	4,342 07	4,342 07	4,351 47	635 40	257 71
	5	3,284 26	1,607 04	1,607 04	1,677 44	209 65	325 94
	6	52,822 41	21,277 12	21,277 12	20,935 67	3,680 35	1,087 49
	7	4,419 05	3,332 32	3,332 32	3,450 14	318 35	398 17
	8	10,102 26	4,811 60	4,811 60	4,692 46	937 27	446 44
						154 12	
						492 19	
						102 81	
						115 58	
						94 00	
						43 60	
						307 94	
						12 00	
						186 94	

VICTORIA.....	4	1,729 96	1,328 15	1,328 15	1 90	87 65	39 50
	5	494 04	305 31	305 31		17 95	15 00
	1	842 95	542 22	542 22		48 75	24 40
	2	2,400 00	597 22	597 22	51 90	71 83	
	3	2,682 54	1,299 25	1,299 25		134 45	88 70
	4	1,462 82	184 78	184 78	46 55	99 58	68 25
	5	20,104 19	9,124 32	9,053 13	226 69	1,147 32	735 16
	6	832 25	914 03	914 03		57 90	84 70
	7	2,918 27	1,544 80	1,544 80		180 17	198 18
WATERLOO.....	1	85,410 25	34,745 23	34,955 89	172 00	4,982 30	2,787 29
	2	12,781 43	6,837 67	6,837 67	544 69	975 30	448 20
	3	19,993 79	10 75	9,710 33	591 45	1,748 55	888 19
	4	7,320 48	6,733 42	6,506 41	262 21	473 85	759 33
	5	7,878 96	4,957 50	5,011 72	125 75	377 00	246 65
	6	4,930 17	2,698 00	2,698 00		328 50	337 97
	7	1,253 12	1,081 24	1,081 24		87 10	84 80
WELLAND.....	1	65,302 00	34,819 38	34,771 12	425 71	5,549 26	2,513 90
	2	1,523 84	737 58	737 58		119 70	175 00
	3	27,082 23	8,885 80	8,856 35	54 45	1,788 95	1,248 56
	4	47,287 84	15,297 99	15,921 54	1,869 83	3,347 95	2,324 77
	5	6,986 63	4,266 27	4,364 07	493 59	639 55	451 27
	6	30,198 52	21,788 04	21,249 90	541 22	2,433 00	1,398 90
WELLINGTON.....	1	75,774 43	26,074 50	25,780 05	346 75	5,764 17	2,161 17
	2	201 57	110 62	110 62		41 16	25 00
	3	Vacant					
	4	6,473 23	3,075 00	2,995 71	118 29	497 93	246 27
	5	6,299 39	4,726 85	4,726 85		329 97	282 25
	6	5,900 00	2,599 00	2,626 65		165 15	201 15
	7	3,847 07	2,732 88	2,595 63	137 25	288 15	289 75
	8	7,599 00	4,694 79	4,868 29	4 12	274 90	174 25
	10	9,417 71	4,897 48	4,705 23	426 36	576 80	413 18
	11	5,693 60	2,341 65	2,348 44	32 22	425 20	303 20
WENTWORTH.....	1	137,937 13	44,589 54	44,682 83	1,965 08	22 65	4,226 54
	2	11,975 06	1,974 91	1,920 64	54 27	8,455 15	602 00
	3	8,123 21	5,131 35	5,131 35		588 80	264 45
	4	3,414 61	10 22	2,056 72	10 00	222 80	227 25
	5	5,922 98	2,399 83	2,313 73	114 22	280 00	109 78
	9	140,759 41	48,745 55	48,605 43	1,798 84	33 92	4,339 18
					2,151 72	9,251 30	

Return of Division Court business from the 1st day of January to the 31st day of December, A. D. 1929, inclusive, showing:—*Concluded*

Name of County, United Counties, or District	Number of Divisions	Number of suits entered in Court, exclusive of Transcripts of Judgments and Judgment summonses.	Amount of claims entered, exclusive of Judgments and Judgment summonses	Balance of Cash in Court from the previous year.		Total amount of Suits' Money paid into Court		Total amount of Suits' Money paid out of Court		Balance of Cash in Court.		Surplus Fees payable to the Hon. the Provincial Treasurer		Clerk's Returns of Emoluments		Bailiff's Returns of Emoluments		Unclaimed moneys
				\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	
YORK.....	1	7,046	538,099 07	6,127 30	110,975 02	112,886 93	4,215 39	1,517 27	30,148 30	14,586 37	8 00							
	2	83	7,344 69	.....	3,620 63	3,620 63	.....	.....	437 82	321 05	.....						
	3	156	12,202 12	324 61	4,464 95	4,640 66	148 90	.....	767 50	248 70	.....						
	4	220	13,269 76	13 00	5,922 11	5,899 61	35 50	.....	874 65	813 28	.....						
	5	56	4,379 21	60 00	1,872 99	1,927 99	5 00	.....	258 55	178 15	.....						
	6	89	5,968 32	38 15	2,926 37	2,949 52	15 00	.....	380 30	266 81	.....						
	7	45	3,049 33	48 45	1,887 08	1,700 13	235 40	.....	211 15	263 27	.....						
	8	1,196	83,408 70	470 15	24,570 58	24,595 05	445 68	898 92	6,122 32	3,917 40	.....						
	9	1,010	53,651 44	117 78	21,507 85	21,262 25	363 38	464 20	4,693 65	2,846 81	.....						
	10	4,589	336,939 45	2,764 62	67,507 44	67,267 54	3,004 52	782 90	19,113 00	10,914 58	.....						
	11	200	10,387 52	248 00	3,781 32	3,747 19	282 13	9,284 76	853 56	539 75	.....						
Totals.....	342	99,444	5,675,848 39	61,201 41	2,262,644 46	2,258,445 15	65,725 72	61,619 18	.....	.....	232 16							

Statement Respecting Police Magistrates

Grey.....	Armstrong, M.....	Markdale.....	1,500 00	177 15	1,677 15	504 45	1,172 70	915 00
".....	Spreman, E. C.....	Owen Sound.....						55 00
".....	Laidlaw, Wm.....	Durham.....						
".....	<i>b</i> Telford, John.....	Hanover.....						
Haldimand.....	Massie, J. C.....	Dunnville.....	3,500 00	1,497 53	4,997 53	2,057 90	2,939 63	1,594 25
Halton.....	Barr, W. J.....	Burlington.....				11 10		461 00
".....	Moore, H. P.....	Acton.....	2,500 00	207 90	2,707 90	681 60	2,026 30	703 50
".....	McIlveen, W. E.....	Oakville.....						2,247 00
Hastings.....	Bedford, H. R.....	Deseronto.....						616 00
".....	Casement, R. R.....	Madoc.....						417 00
".....	Clarman, G. L.....	Bancroft.....	1,500 00	27 00	1,527 00	40 75	1,486 25	257 00
".....	Mikel, W. C.....	Belleville.....	1,700 00	300 00	2,000 00	528 91	1,471 09	743 00
".....	O'Rourke, T. A.....	Trenton.....						208 00
Huron.....	Andrews, S. J.....	Clinton.....						10 00
".....	Greig, J. C.....	Seaforth.....						
".....	Reid, C. A.....	Goderich.....	2,500 00	259 55	2,759 55	950 75	1,808 80	167 00
Kenora.....	Kinney, J. A.....	Kenora.....	800 00	7 83	807 83	67 00	740 83	296 00
".....	Pronger, R. H.....	Dryden.....	1,200 00		1,200 00	64 05	1,135 95	108 00
Kent.....	Arnold, S. B.....	Chatham.....	1,000 00	24 80	1,024 80	1,348 60		1,919 30
".....	Stennett, H. P.....	Ridgetown.....						70 00
".....	Carscallen, A. B.....	Wallaceburg.....	1,000 00	8 40	1,008 40	385 35	623 05	213 35
".....	*Fox, F. J.....	Wheatley.....						
".....	Callwood, H.....	Tilbury.....						353 00
Lambton.....	Woodrow, C. S.....	Sarnia.....	1,500 00	264 20	1,764 20	1,839 50		1,696 00
Lanark.....	Kirkland, J. T.....	Almonte.....	500 00	85 90	585 90	92 00	493 90	159 00
".....	McNeely, J. S. L.....	Perth.....						55 00
".....	Patchell, Robt.....	Carleton Place.....						100 00
".....	Sparham, B. E.....	Smith's Falls.....						516 50
Greyville.....	Atkinson, H.....	Kemptville.....	1,500 00	318 50	1,818 50	465 55	1,352 95	698 00
".....	Halpin, P. K.....	Prescott.....						

*a*W. W. Patterson died October 29th, 1929.

*b*John Telford died November 10th, 1929.

*c*G. L. Jarman died.

*No returns received.

Police Magistrates, Province of Ontario, 1929—Continued

County or District	Name	Address	Salary paid by Province		Expenses paid by Province		Total cost to Province		Total fees paid to Province		Net cost to Province		Fines paid through Office of Inspector of Legal Offices	
			\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.
Leeds and Grenville	Page, J. A.	Brockville	1,000	00	18	50	1,018	50	360	85	657	65	706	85
"	Pinkerton, J. B.	Elgin												
"	Preston, D. K.	Newboro												
"	Sampson, J. H.	Gananoque											55	00
Lennox and Addington	Graham, M. P.	Napanee	1,200	00			1,200	00	1,198	30	1	70	855	00
"	Lloyd, J. L.	Northbrook	300	00	1	75	301	75	71	05	230	70	411	00
Lincoln	Campbell, J. H.	St. Catharines	1,000	00	300	00	1,300	00	1,161	79	138	21	2,688	00
Manitoulin	Major, F. W.	Gore Bay	1,800	00	1,123	78	2,923	78	289	50	2,634	28	770	00
Middlesex	Scandrett, T. W., K. C.	London											600	00
"	Hawkshaw, C. W.	Lucan											4,463	00
"	McKay, S. G.	Ailsa Craig												
"	Trueman, R. M.	Strathroy												
"	Zapfe, F. T.	"	1,500	00			1,500	00	157	00	1,343	00	126	00
"	McIntyre, Alex.	Wardsville												
Muskoka	Myers, J. G.	Bracebridge	600	00	41	85	641	85	292	25	349	60	642	00
"	Farnsworth, H.	Huntsville											137	00
Nipissing	Fortier, W. L.	Sturgeon Falls											428	00
"	McGaughey, C. S.	North Bay	2,000	00	83	80	2,083	80	549	00	1,534	80	889	00
"	Weegar, S.	"											120	00
Norfolk	Gunton, R. E.	Simcoe	2,300	00	13	00	2,313	00	1,671	10	641	90	1,684	50
Northumberland and Durham	Campbell, W. A. F.	Port Hope											1,961	00
"	Colville, Neil	Orono												
"	Floyd, W. H.	Cobourg	1,200	00	566	85	1,766	85	511	25	1,255	60	1,283	86
"	Jakeman, W. A.	Bethany											55	00
"	Payne, G. A.	Campbellford											61	00
"	Ward, W. F.	Bowmanville											445	00

Ontario	Clark, W. J.	Pickering							1,597 00
"	Bick, C. F.	Cannington							105 00
"	Hind, A. F.	Oshawa							391 00
"	Purdy, E. H.	Port Perry							82 00
	Willis, J. E.	Whitby	2 50						207 00
Oxford	Ball, Alfred S.	Woodstock							
"	Paterson, J. L.	Ingersoll	407 85	2,007 85	1,140 95	866 90			3,417 00
"	Treffery, G. H.	Otterville							
Parry Sound	Broughton, J. D.	Parry Sound	143 04	2,063 04	514 35	1,548 69			950 00
"	Wilson, J. J.	Burk's Falls	219 05	1,419 05	470 70	948 35			1,530 00
Patricia	Holland, H. E.	Goldpines	201 00	801 00	62 50	738 50			445 00
Peel	Burgess, C. H.	Port Credit							30 00
"	Bull, L. J. C.	Brampton							3,189 00
Perth	Butcher, W. R.	St. Mary's							10 00
"	Hamilton, T. L.	Listowel							26 00
"	Makins, J. A.	Stratford	212 80	1,212 80	552 45	660 35			1,031 00
	Trini, Chas.	Milverton							
Peterborough	Langley, O. A.	Peterborough	69 25	1,369 25	480 40	888 85			400 00
Russell	Erskine, W. T.	Rockland							731 50
Prescott	Lawlor, H. W.	Hawkesbury		1,000 00	299 81	700 19			634 00
"	Poulin, B. R.	L'Orignal							61 00
"	Thistlethwaite, F. W.	Vankleek Hill							
Prince Edward	Norman, R. A.	Picton							108 00
Rainy River	Cruso, H. L.	Fort Frances	122 60	2,122 60	554 50	1,568 10			722 00
Renfrew	Chown, S. T.	Renfrew	302 50	2,802 50	396 70	2,405 80			821 00
"	Craig, David	Arnprior							178 00
"	MacGregor, W. K.	Pembroke							349 00
"	Mackay, W. A.	Renfrew							55 50

aF. W. Thistlethwaite died October 12th, 1929.

Police Magistrates, Province of Ontario, 1929—Continued

County or District	Name	Address	Salary paid by Province		Expenses paid by Province		Total cost to Province		Total fees paid to Province		Net cost to Province		Fines paid through Inspector of Legal Offices	
			\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.
Simcoe	Brown, E. B.	Victoria Harbour	400	00			400	00	123	00	277	00	48	00
"	Cook, Frank	Midland	1,000	00			1,000	00	78	25	921	75	501	00
"	Gover, H.	Coldwater	500	00			500	00	70	50	429	50	186	00
"	Copeland, G. E.	Penetanguishene	600	00	103	45	703	45	247	00	456	45	221	00
"	Hogg, W. A.	Collingwood	1,000	00	120	44	1,120	44	673	20	4,750	00	4,750	00
"	Jeffer, C.	Barrie	1,300	00	251	50	1,551	50	872	25	679	25	1,321	00
"	McCaughrin, D.	Orillia												
Stormont, Dundas and Glengarry	Dever, E. J.	Alexandria											75	00
"	Miller, A. O.	Avonmore												
"	Milligan, J. C.	Cornwall	1,500	00			1,500	00	483	30	1,016	70	658	00
"	McCormick, Jno.	Winchester	1,500	00	168	66	1,668	66	668	65	1,000	01	796	00
"	Watson, G. A.	Williamstown	1,500	00	9	85	1,509	85	206	85	1,303	00	296	00
Sudbury	McKessock, J. S.	Sudbury	2,100	00			2,100	00	982	75	1,117	25	2,409	00
"	Stoddart, Thos.	Copper Cliff	3,000	00	329	40	3,329	40	2,738	75	590	65	3,690	90
Temiskaming	Atkinson, S.	Haileybury	3,600	00	1,295	85	4,895	85	2,776	25	2,119	60	1,905	00
Thunder Bay	O'Brien, W. W.	Port Arthur	1,200	00	7	70	1,207	70	318	00	889	70	2,130	00
"	O'Connor, J. J.	"	2,000	00	1,444	00	3,444	00	629	00	2,815	00	1,885	00
"	Palling, Wm.	Fort William	800	00			800	00	112	00	688	00	1,584	00
Haliburton and Victoria	Jordan, G. A.	Lindsay	1,200	00	57	70	1,257	70	476	60	781	10	1,237	00
Waterloo	Wier, J. J. A.	Kitchener	1,400	00	78	00	1,478	00	1,053	00	425	00	1,230	00
Welland	Clark, Jos.	Ridgeway											1,666	00
"	Fraser, Alex.	Niagara Falls											1,013	00
"	Goodwin, John	Welland											1,146	50
"	Malkin, W. T.	Bridgeburg	800	00			800	00	872	25			500	00

Wellington.....	Hellyer, A.....	Kenilworth.....	1,000 00	170 40	1,170 40	516 60	653 80	375 50
".....	Scott, W. W.....	Moorefield.....	.....	.....	.....	.....	.....	.....
".....	Watt, F.....	Guelph.....	1,000 00	.....	1,000 00	1,121 00	.....	3,320 00
".....	Welsh, D. H.....	Palmerston.....	.....	.....	.....	.....	.....	115 00
".....	Woodman, A. C.....	Drayton.....	.....	.....	.....	.....	.....	25 00
Wentworth.....	Fry, J. S.....	Dundas.....	.....	.....	.....	.....	.....	40 00
".....	aJelfs, G. F.....	Hamilton.....	1,800 00	.....	1,800 00	2,755 50	.....	8,677 00
".....	Vance, J. F.....	".....	.....	.....	.....	.....	.....	.....
York.....	Keith, Wm.....	Toronto.....	.....	.....	.....	69 00	.....	3,362 50
".....	Davidson, D.....	Mimico Beach.....	1,500 00	825 38	2,325 38	5,198 50	.....	8,269 00
".....	Duncan, G. H.....	Richmond Hill.....	.....	.....	.....	.....	.....	503 55
".....	Toronto Police Court.....	City Hall.....	.....	.....	.....	.....	.....	1,730 00

aMr. Jelfs resigned; H. A. Burbidge appointed—Order-in-Council, July 29th, 1929.

Observations, Directions and Decisions

OBSERVATIONS, DIRECTIONS, AND DECISIONS GIVEN BY JOSEPH
SEDGWICK, INSPECTOR, IN REFERENCE TO THE VARIOUS
OFFICES

SHERIFFS

WRITS OF FI FA.

In many offices I find it the practice of the Sheriff to consider Executions as merely filed documents on which no action need be taken. It should be borne in mind that an Execution means what it says on its face, i.e., it is a command directed to the Sheriff by a Superior Court ordering him to make the money. Sheriffs should take prompt action thereunder, and make their return to the solicitor lodging the Execution without delay.

RENEWALS

There is no obligation on the Sheriff to notify the profession of expiring executions, but I suggest that it is a great convenience to the profession and profitable to the Sheriff to do this. It is the practice in the office of the Sheriff of Toronto to return the writ a reasonable time before its expiration, with the following memo attached:—

“The accompanying writ is sent to you for renewal and if renewed, then return to my office with the necessary filing fee, viz., C.C. \$1.50; S.C.O. \$2.00.

Should you wish to have copy sent to the Land Titles' Office, or continued there if already sent, the further fee is 50c. and \$1.00 respectively.

The continuous renewal of Fi Fa has the effect of keeping the judgment alive notwithstanding the limit of twenty years. See *Poucher V. Wilkins*, 33 O.L.R., P. 125.

In event of non-renewal be good enough to advise.

R. A. PYNE,
Sheriff of Toronto.

This Writ expires:—

IMPORTANT

See Rule 571—last paragraph:—

A writ so marked shall be placed in the hands of the Sheriff before its expiry, etc.”

See that your Writs are *returned* to Sheriff *renewed* before expiry, by registered letter or in person.”

I suggest that this form may be useful to Sheriffs who see fit to adopt a similar practice.

SEARCHES

The fee for a Certificate of Executions against one person is \$1.00, and this is irrespective of the number of executions in the hands of the Sheriff against such person. (Items 19 and 20, Tariff “C” Consolidated Rules, 1928.) I find some Sheriffs charging so much for every execution appearing on

the certificate. As pointed out, this is improper. It is also improper to permit the public or profession to have access to the Sheriff's books for the purpose of searching executions. All searches, whether a certificate is given or not, should be made by the Sheriff or his assistant.

SERVICE OF WRITS, ETC.

Sheriffs are reminded of Item 1 of the Sheriffs' Tariff—fee for service of process, which provides that "when more than one paper is served at the same time it shall be considered as one service." Thus where a writ and notice of motion are served together there will be one fee only.

The fees allowed by Tariff "C" are Sheriffs' fees only, and for service of writs and other process fees should only be allowed as a party and party cost when the service is made by the Sheriff or his officer.

FEE ON TRIALS

Item 21 of Tariff "C" allows a fee of \$1.00 on trials. This applies to the trial of civil actions, and I have been asked whether the fee is payable where a case is not tried but is merely spoken to in Court. My opinion is that in such cases this fee is not properly chargeable. There should be an actual hearing for the fee to be payable.

CREDITORS RELIEF ACT, R.S.O. 1927, CHAP. 113

When monies are levied by a Sheriff under an execution against the property of a debtor the provisions of this Act must be borne in mind. Even where there is only one execution under which the Sheriff acts, the proceeds should not be distributed to the creditor until after thirty days from the time of the levy and entry thereof in the Sheriff's book, as during that period other creditors have a right to file their executions or certificates and share rateably in the money under the provisions of this Act (Section 5).

This only applies where there is a sale by the Sheriff. Where, without a sale, the debtor pays to the Sheriff the full amount owing in respect of the executions, or pays part of the amount owing in respect of an execution where there is only one. Section 5 above referred to does not apply and the Sheriff may distribute forthwith. See Section 20 (1) and (3), Creditors Relief Act.

FEES—COURT CRIERS AND CONSTABLES

The following is a copy of an Order-in-Council approved by The Honourable The Lieutenant-Governor dated the 14th day of January, A.D. 1930, and affecting Court Criers and Constables' fees:—

Upon the recommendation of the Honourable the Attorney-General, the Committee of Council advise that, in pursuance of Section 2 of The Administration of Justice Expenses Act, R.S.O. 1927, Chapter 126, as amended by George V, Chapter 40, the following amendments and alterations be made in the following items of the tariff under The Administration of Justice Expenses Act, in connection with Court Criers' fees and Constables' fees:

COURT CRIERS' FEES

Item 5 and Item 6 are repealed and the following substituted therefor:
 Item 5: Calling and swearing each witness or constable..... \$0.25

Item 6: Attending High Court Division, General Sessions, County Court and County or District Court Judges' Criminal Court, per diem.....	\$3 00
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CONSTABLES' FEES

Items 1, 3, 4, 5, 6, 8, 10, 11, 13, 15, 20 and 24 in the tariff of fees for Constables in Schedule A, of The Administration of Justices Expenses Act are repealed and the following substituted therefor:

Item 1: The arrest of each individual upon a warrant, or arresting without a warrant an individual, who is subsequently convicted or committed for trial.....	\$2 00
Item 3: Mileage to serve summons or subpoena or to make an arrest, one way, per mile..... (If no public conveyance is available, reasonable livery charges to be allowed.)	15
Item 4: Mileage when service cannot be effected, upon proof of due diligence, one way, per mile.....	15
Item 5: Returning with prisoner after arrest to bring same before Magistrate or Justice for preliminary hearing or trial where the Magistrate or Justice is not at the place where the warrant was handed to the Constable and where the journey is of necessity over a different route than that travelled to make the arrest, per mile, one way.....	15
Item 6: Taking a prisoner to gaol on remand or committal, one way (Not payable if this is return journey from taking prisoner before the Justice. Double mileage not being chargeable.)	5
Item 8: Attending Magistrate or Justice on summary trials or on examination of prisoners charged with crime, for each day necessarily employed, only one day's fee on any number of cases.....	2 50
Item 10: Mileage travelling to attend Courts mentioned in Item 9. (When public conveyance can be taken, only reasonable disbursements to be allowed.)	15
Item 11: Constables attending as witnesses in indictable cases at the Assizes, County or District Court, Judges' Criminal Court, or before Police Magistrates in cases tried under Part 16 of the Criminal Code, each day..... (In the case of Constables attending a trial at a place other than where such constable resides, railway fares and reasonable hotel and other travelling expenses shall be allowed in addition to the above.)	2 50
Item 13: Attending each adjournment thereof.....	2 50
Item 15: Mileage, serving same.....	15
Item 20: Travelling to make distress or to search for goods to make distress, where no goods are found, one way, per mile.....	15
Item 24: Mileage to execute search warrant.....	15

Certified,

C. F. BULMER,
Clerk, Executive Council.

NOTE:—Magistrates and Constables should bear in mind that when an accused is ordered to pay costs the above tariff must be adhered to. I find that in some instances constables have been charging their mileage at 10 cents a mile each way, presuming to do so under the authority of Order-in-Council of October 8th, 1925. That Order-in-Council applies only as between the Government and its servant, but as between the officer and the public the Administration of Justice Expenses Act and the fees authorized thereunder will govern.

LOCAL REGISTRARS

CHILDREN OF UNMARRIED PARENTS ACT

Officers are reminded of the regulations promulgated under the above act and published in the 1927 report of the Inspector of Legal Offices (pages 60 and 61). Attention is particularly drawn to Regulation 7 which provides that all Orders under this Act shall be entered in full in a book kept solely for that purpose. In some offices I notice that these orders are not separately recorded, and wherever that practice prevails a proper book must be secured and the regulation complied with in future.

THE ADOPTION ACT, R.S.O. 1927, CHAPTER 189

This Act by Section 8 (3) provides as follows:

An application for an adoption order may be heard and determined in chambers, and if the child was born out of wedlock this fact shall not appear upon the face of the adoption order. The papers used upon an adoption application shall be sealed up and shall not be open for inspection save upon the direction of a judge or the provincial officer.

The object of this section is to protect adopted children, and the fact of their having been adopted should be kept secret so far as the Court records go. Applications under this act should be recorded in a separate book kept solely for that purpose, and particulars of any orders made under this act should not appear in the general procedure book of the Clerk.

LAW STAMPS

It has come to my attention that some of the officers are issuing orders and other process in connection with which Law Stamps are payable without first insisting upon the proper stamps being attached and cancelled, particularly in proceedings in Surrogate Courts where, in some instances, the profession are given credit for fees, including those payable to the Crown and Judge in stamps. This practise is entirely contrary to The Law Stamps Act, R.S.O. 1927, Chapter 27, and officers are referred to Sections 5, 6, 11, 19, and 20 of that Act. It will be observed that Sections 19 and 20 provide heavy penalties for any person issuing any proceeding without the same having been first duly stamped. It is the duty of the Surrogate Registrar to see that proper stamps are affixed before presenting papers to the Surrogate Judge, and the Judge should not sign an Order until he makes sure that sufficient stamps for the fees of the Crown and the Judge are affixed and cancelled.

POLICE MAGISTRATES

PROCEDURE ON SUMMARY TRIAL OF INDICTABLE OFFENCES

All Magistrates are again reminded that their authority to try indictable offences is derived through the consent of the accused, and in order that his election may be a proper one the provisions of Section 781 should be strictly complied with. That is, the Magistrate should tell the accused that he is charged with the offence, describing it, and should then say:—

“On this charge you have the option to be forthwith tried by me without the intervention of a jury, or you may remain in custody or under bail, as the Court decides, to be tried in the ordinary way by the Court having Criminal jurisdiction. How do you wish to be tried?”

No different form should be used, and the question should be put to the accused himself and the answer given by him, not by his counsel.

The Province will be saved the expense of many unnecessary appeals if Magistrates will in future adhere rigidly to this procedure.

REGISTRARS OF DEEDS

DISCHARGES OF MORTGAGES, FEES

By Section 10 of The Registry Act, 1929, the fee for registering a Discharge of Mortgage was raised from \$1.00 to \$1.50. Also by the same Act, Section 7 (2), it is provided that a Registrar must require the production of the original duplicate mortgage with the discharge, and must stamp “Discharge Registered” on such duplicate before returning it. For this latter service the Registrar is not entitled to an additional fee, and unless specifically so requested it is unnecessary for the Registrar to endorse on the original duplicate mortgage a certificate to the effect that a discharge thereof has been registered. Where the Registrar is asked to give such a certificate, and complies, he is then entitled to an additional 50-cent fee, but not otherwise.

DECLARATIONS AS TO CELIBACY, ETC., UNDER THE REGISTRY ACT, 1929, SECTION 5

I have been asked for my opinion as to the application of the above legislation to the following cases:—

1. Does this Act make necessary a Declaration of Celibacy, or in the alternative, a release of dower, on contracts in connection with the sale of agricultural implements, etc., registered pursuant to Section 34 of The Registry Act?

It is my opinion that such a declaration or bar of dower is here unnecessary. Section 5 applies “where a conveyance or mortgage is made by a man and no one joins therein as his wife,” but I do not consider instruments such as those under consideration to be either conveyances or mortgages. In fact such a construction is precluded by the language of Section 34, which refers to “an instrument, not purporting to convey the land therein mentioned, etc.” Such instruments, therefore, are not affected by the new legislation.

2. Does the Act apply to conveyances by Executors where the beneficiaries join merely as consenting parties?

For the reasons given in my answer to Question 1, above, I think the Act does not apply here. The consenting parties execute the conveyance, but merely to signify their approval, and do not "make the conveyance," and, therefore, in my opinion, do not come within the Statute.

PARTIAL DISCHARGE OF MORTGAGE

I have been asked my opinion as to whether Section 7 of The Registry Act, 1929, applies to partial discharges. My opinion is that it does not, as the section contemplates a surrender of the original duplicate mortgage and its defacement by the perforation thereon of the words "Discharge Registered." It is obviously incorrect to so deface a mortgage only partially discharged, and I feel, therefore, that the Act does not apply to such instruments. And in any event, a mortgagee only partly paid cannot be asked to surrender his duplicate mortgage.

Appointments

APPOINTMENTS

SHERIFFS

Gazette, August 10th, 1929.—Walter Stanley Wagar of the City of North Bay, in the District of Nipissing, Esquire, to be a Sheriff in and for the Provisional Judicial District of Nipissing in the room and stead of Peter Groulx, deceased.

JUDGES AND LOCAL MASTERS, S.C.O.

Gazette, January 12th, 1929.—His Honour Edward John Daly, Judge of the County Court of the County of Carleton, to be Judge of the Surrogate Court in and for the said County of Carleton, in the room and stead of His Honour Judge Mulligan, deceased.

Gazette, October 19th, 1929.—His Honour William Norman Munro, Judge of the County Court of the County of Halton, to be Judge of the Surrogate Court in and for the County of Halton.

Gazette, October 19th, 1929.—His Honour William Norman Munro, Judge of the County Court of the County of Halton, to be Local Master of the Supreme Court of Ontario in and for the said County of Halton.

Order in Council, October 22nd, 1929.—His Honour Edmond Proulx, Judge of the District Court of the District of Sudbury, to be Judge of the Surrogate Court; also Local Master of the Supreme Court in and for the said District of Sudbury, in the room and stead of His Honour J. J. Kehoe, deceased.

Order in Council, October 22nd, 1929.—His Honour Edwin Whyte Clement, Judge of the County Court of the County of Waterloo, to be Judge of the Surrogate Court of the said County of Waterloo, in the room and stead of His Honour E. J. Hearn, deceased.

Order in Council, October 22nd, 1929.—His Honour Francis Thomas Costello, Judge of the County Court of the United Counties of Stormont, Dundas and Glengarry, to be Judge of the Surrogate Court and Local Master of the Supreme Court in and for the said United Counties, in the room and stead of His Honour J. G. O'Reilly, deceased.

CROWN ATTORNEYS AND CLERKS OF THE PEACE

Gazette, December 21st, 1929.—Vincent Joseph McElderry, of Peterborough, Esquire, K.C., to be Crown Attorney and Clerk of the Peace in for the County of Peterborough, in the room and stead of G. W. Hatton, K.C., deceased.

Order in Council, October 22nd, 1929.—S. A. V. Martin, of Ottawa, to be Crown Attorney and Clerk of the Peace in and for the United Counties of Prescott and Russell, *pro tempore*, in the room and stead of F. W. Thistlethwaite, deceased.

LOCAL REGISTRARS, ETC.

Gazette, February 16th, 1929.—William J. Reilley, Assistant Master of the Supreme Court of Ontario at Osgoode Hall, to be Registrar of the Surrogate Court in and for the County of York, *pro tempore*, in the room and stead of A. F. Wallis, deceased.

Gazette, September 14th, 1929.—Joseph Elijah Thompson, of the City of Toronto, Esquire, to be Registrar of the Surrogate Court in and for the County of York, in the room and stead of W. J. Reilley.

REGISTRARS OF DEEDS AND LOCAL MASTERS OF TITLE

Gazette, October 19th, 1929.—Maxime Brunette, Registrar of Deeds in and for the Registry Division of the Provisional Judicial District of Sudbury, to be Local Master of Titles in and for the said Provisional Judicial District of Sudbury.

POLICE MAGISTRATES AND JUVENILE COURTS

Gazette, June 29th, 1929.—William Joynt, Police Magistrate of the County of Carleton (exclusive of the City of Ottawa), and the County of Russell, to be Deputy Judge of the Juvenile Court in and for the City of Ottawa.

Gazette, August 3rd, 1929.—Henry Arnold Burbidge, of the City of Hamilton, in the County of Wentworth, Esquire, K.C., to be Police Magistrate in and for the said City of Hamilton.

Gazette, August 17th, 1929.—Henry Arnold Burbidge, K.C., of the City of Hamilton, in the County of Wentworth, to be appointed Judge of the Juvenile Court in and for the said City of Hamilton in the room and stead of George Frederick Jelfs, resigned. The said Henry Arnold Burbidge, K.C., shall also be designated as Judge under The Children's Protection Act, Chapter 279, R.S.O. 1927.

Gazette, August, 17th, 1929.—Arthur Hanrahan, of the City of Windsor, in the County of Essex, to be Deputy Police Magistrate in and for the said City of Windsor, the City of East Windsor, the Town of Walkerville, the Town of Sandwich and the said County of Essex.

Gazette, August 17th, 1929.—George Frederick Jelfs, of the City of Hamilton, in the County of Wentworth, to be Probation Officer in and for the County of Wentworth, including the City of Hamilton.

CORONERS

Gazette, January 5th, 1929.—Ernest Argyle White, of the Village of Fenelon Falls, in the County of Victoria, Esquire, to be a Coroner in and for the said County of Victoria.

Gazette, January 12th, 1929.—Frederic George Davis, of the Town of Pala, in the District of Muskoka, Esquire, to be a Coroner in and for the Provisional Judicial District of Muskoka.

Gazette, January 19th, 1929.—John Roy Macpherson, of Duart, Ontario, Esquire, M.D., to be a Coroner in and for the County of Kent.

Gazette, February 16th, 1929.—George Albert Cowie, of Thedford, Esquire, M.D., to be a Coroner in and for the County of Lambton.

Gazette, February 16th, 1929.—Dugald S. Macdougall, of Russell, Esquire, M.D., to be a Coroner in and for the United Counties of Prescott and Russell.

Gazette, March 16th, 1929.—Wilfred Theodore Pocock, of Kearney, Esquire, M.D., to be a Coroner in and for the Provisional Judicial District of Nipissing.

Gazette, March 22nd, 1929.—Charles Lambert Brooke Stammers, of Smith's Falls, Esquire, M.D., to be a Coroner in and for the County of Lanark.

Gazette, March 22nd, 1929.—Thomas Henry McKillip, of Nakina, Esquire, M.D., to be a Coroner in and for the Provisional Judicial District of Thunder Bay.

Gazette, April 27th, 1929.—Murray Case Morrison, of Thorndale, Esquire, M.D., to be a Coroner in and for the County of Middlesex.

Gazette, April 27th, 1929.—Thomas Roy McLeod, of Adelaide, Esquire, M.D., to be a Coroner in and for the County of Middlesex.

Gazette, June 22nd, 1929.—Edward Blanchard, of Cannington, Ontario, Esquire, M.D., to be a Coroner in and for the County of Ontario.

Gazette, June 22nd, 1929.—Archibald Campbell McGlennon, of Colborne, Ontario, Esquire, M.D., to be a Coroner in and for the United Counties of Northumberland and Durham.

Gazette, July 6th, 1929.—James Taylor Thomas, of Caledon, Esquire, M.D., to be a Coroner in and for the County of Peel.

Gazette, July 6th, 1929.—James S. McKessock, of the Town of Sudbury, Esquire, to be a Coroner in and for the Provisional Judicial District of Sudbury.

Gazette, July 20th, 1929.—Thomas Stoddart, Police Magistrate for the Provisional Judicial District of Sudbury, to be a Coroner in and for the said Provisional Judicial District of Sudbury.

Gazette, August 3rd, 1929.—Omer Joseph Rochon, of the Town of Tilbury, Esquire, M.D., to be a Coroner in and for the County of Kent.

Gazette, August 31st, 1929.—Dr. George Nelson Earle, of the Village of Omemee, in the County of Victoria, to be Coroner in and for the said County of Victoria.

Gazette, August 31st, 1929.—Dr. James Thomas Fallon, of the Village of Madawaska, in the Provisional Judicial District of Nipissing, to be Coroner in and for the said Provisional Judicial District of Nipissing.

Gazette, August 31st, 1929.—Elmore Leonce McInnis, of Dunnville, Esquire, M.D., to be a Coroner in and for the County of Haldimand.

Gazette, September 28th, 1929.—Duane R. Hall, of the Town of Napanee, Esquire, M.D., to be a Coroner in and for the County of Lennox and Addington.

Gazette, October 5th, 1929.—Thomas J. Johnston, of the Town of Midland, Esquire, M.D., to be a Coroner in and for the Provisional Judicial District of Muskoka.

Gazette, October 19th, 1929.—William Salem Caldwell, of Maple, Ontario, Esquire, M.D., to be a Coroner in and for the County of York.

Gazette, October 19th, 1929.—Herbert Ernest Eckardt, of Shannonville, Esquire, M.D., to be a Coroner in and for the County of Hastings.

Gazette, October 19th, 1929.—Robert Dudley Blott, of Dunnville, Esquire, M.D., to be a Coroner in and for the County of Haldimand.

Gazette, November 12th, 1929.—Walter Reuben Wigmore Haight, of Richmond, Esquire, M.D., to be a Coroner in and for the County of Carleton.

Gazette, November 16th, 1929.—Daniel Logan Stewart, of Thamesville, Esquire, M.D., to be a Coroner in and for the County of Kent.

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