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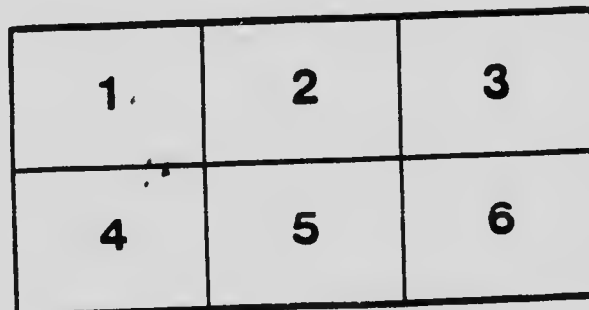
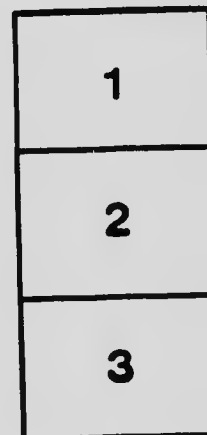
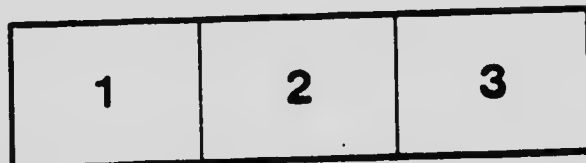
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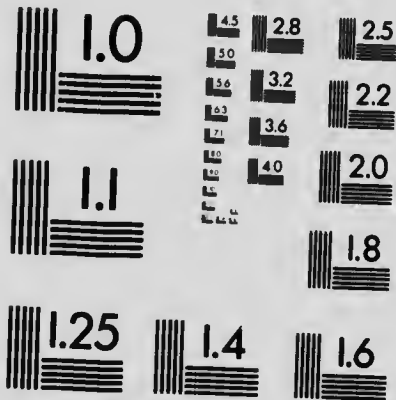
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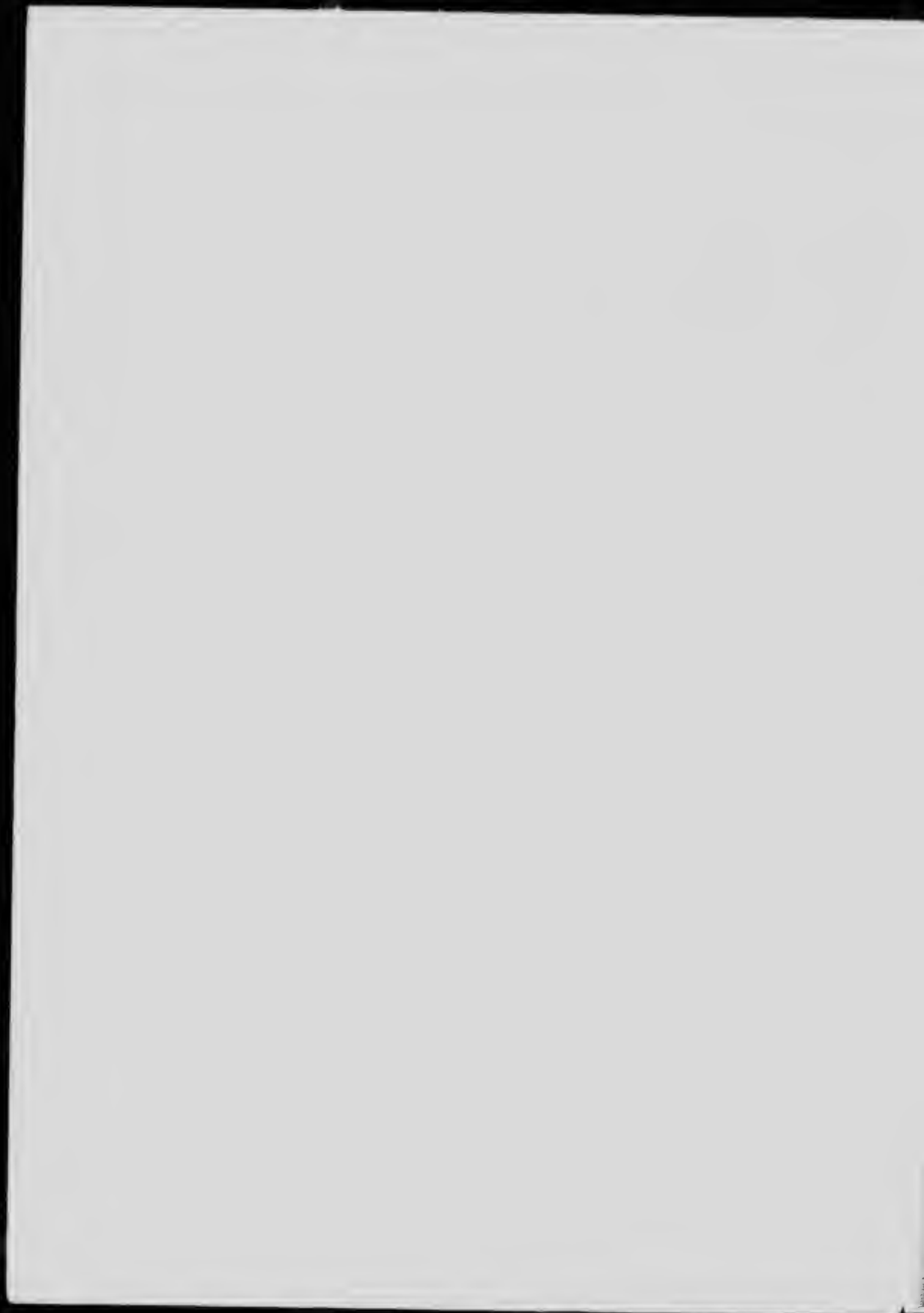
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MUNICIPAL TRADING IN GREAT BRITAIN



Municipal Trading

IN

Great Britain

WILLIAM RICHMOND SMITH

WILLIAM BRIGGS
TORONTO
1904

178611

Entered according to the Act of the Parliament of Canada, in the
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INTRODUCTION

The municipal ownership and conduct of popularly used public services is a subject which is receiving considerable attention in Canada. In the city of Toronto, at various times during the past few years, there have been more or less popular agitations for the acquirement and conduct, by the local municipal authorities, of the street railway service, the gas service and the electric light service. In other parts of the country there have been similar agitations, which have resulted, in the city of Winnipeg in the municipalization of the gas service, and in the towns of Port Arthur and Fort William of municipal telephone and other services. Other municipalities, including Brockville, Kingston, Woodstock and several smaller places have also undertaken enterprises of various kinds.

The city of Toronto owns its own street railway franchise, which was improved and electrified, and is now being conducted under lease by a private company. Its gas and electric light franchises are in the hands of private companies, as are also extensive franchises for developing and distributing electric

energy for power and other purposes from Niagara Falls.

In all of the larger towns and cities of Canada the water supplies are both owned and operated by local municipal authorities, and a special water rate is generally levied to cover the cost of the service. A return ordered at the last session of the Legislature of Ontario contains some interesting information on this and other points connected with the municipal conduct of reproductive undertakings. It covers the period from 1898 to 1902 and, while not yet officially completed, shows that the combined total capital invested in this direction by cities, towns and villages in the province amounts to \$19,083,947. Toronto's investment for waterworks is given as \$4,171,151, with average annual working expenses of \$403,411 and average annual income of \$379,284, leaving an average annual deficit of \$24,127. The return is interesting as showing in detail to what extent municipal enterprises have been undertaken in Ontario, but the business merits of such enterprises could be accurately estimated only by an examination of the methods of accounting pursued by the municipal corporations concerned.

Although a number of towns and cities in the Dominion own one or more of the franchises under which public services have been created, comparatively few have undertaken the task of conducting the services under them. There is, however, especially in the city of Toronto, a movement of popular opinion

in that direction, which promises to make the whole question of municipalization of public utilities an important one in Canada before many years.

While in England and Scotland during the summer of 1903, the writer had exceptional opportunities afforded him of obtaining official information regarding the business results which have attended the more matured experience of municipal authorities in the Mother Country in acquiring and conducting public services as municipal undertakings. Without attempting to go into the merits of the question, the information thus obtained is submitted in hope that it may be of use in aiding the deliberations of those interested in the subject.

The grateful acknowledgments of the author are due to Sir John Ure Primrose, Bart., Lord Provost of the city of Glasgow, through whose courtesy and kindness access was obtained to the splendidly kept records of the various municipal enterprises in the Scotch metropolis, and to the managers and officials of those enterprises for the cheerful and kindly manner in which information and explanations were given. In the city of Birmingham, the town clerk, Mr. Edward Orford Smith, and the other municipal officials, gave valuable assistance in obtaining official information regarding the municipal undertakings in that city.

W. R. S.

Toronto, February 20th, 1904.

CHAPTER I.

MUNICIPAL TRADING, A MATTER OF BUSINESS AND PUBLIC EXPEDIENCY.

IT has now come to be generally recognized that all franchises for the establishment of public services in a municipality which touch in any way the question of public health should remain vested in the Municipal Corporation served. It is easy to see, for instance, that a duty devolves upon all populous communities to retain absolute control of their water supplies, for, in the first place, a pure and adequate water supply is one of the prime essentials to public health, and, in the second place, such a service necessarily involves the use of public streets and highways. In Canada this duty is recognized to such an extent that all large communities not only control, but conduct and levy rates for the support of their systems of water supply. It is generally admitted that the first consideration in such a service is not cost, but efficiency. As an absolute necessity to all classes of the population, it is conceded that a water service should never be dependent upon conditions of private profit, nor liable to the accidents incident to private management. It may or may not be that a community is getting its water as economically as possible; the principal consideration in the public mind is whether the supply is as pure and as plentiful as it should be. All other public services are more or less in the

nature of luxuries, which are used to a greater or less extent by limited sections of the population, and as such are not entitled to have any deficits in management made up out of monies raised by a general system of taxation. From a strictly economic standpoint, therefore, there is no complete analogy between the water franchise of a community and the other franchises on behalf of which, as Municipal institutions, the similar operation of a water franchise is so often urged.

Of later years, it has also been widely contended that franchises for the creation of other public services, which do not touch the question of public health but which involve only the monopolistic use of public streets or high ways, should remain vested in the representatives of the people.

The idea of public ownership, and management of public utilities, must always be a seductive one to the public mind, just as private ownership is attractive to the individual. Moreover, it is, and always will be, a popular theme of professional politicians, because from it can be evolved an attractive proposition, unanswerable so far as its general principle is concerned, and demanding from the propagandist nothing more than the most general form of proof as to its commercial soundness. Every student of modern municipal institutions can recall instances where propositions of such municipal management, utterly unworkable in practice, have been received with popular favor simply because, the general principle of ownership being recognized as a sound one, the public were unable, from the facts presented, to judge of the commercial and financial merits of the particular proposition submitted.

Public ownership and conduct of essential franchises has been tested in many forms and by various municipalities under almost all conditions. In some it has been sufficiently successful to justify the acceptance of the general principle; in others it has failed, sometimes partially, sometimes utterly. It is not the principle of municipal ownership that is weak, it is the application of that principle to the conduct of services under publicly-owned franchises. The weakness of the application lies in the fact that, under present commercial conditions, an undertaking operated in the interest of the ratepayers must be subject to the same rigid business methods as are applied to private enterprises, in order to secure any measure of success.

In no country, perhaps, has the application of this principle been tested upon so extensive a scale as in Great Britain. In the cities of England and Scotland are to be found probably its greatest successes as well as its most dismal failures. It is in the hope that a short study of the more matured experience of municipal corporations in the Mother Country in dealing with this question, may be of interest and value to students of municipal economy in Canada, that these pages are written.

The question whether a municipality should create and conduct such public services cannot be decided upon any question of principle. It is simply a matter of business and public expediency. What the public has a right to expect is that it should get the greatest possible return from the capital invested in what is essentially a business enterprise owned, established and conducted for the ratepayers. It does not always follow, however, that the greatest possible return can

be secured by the municipalization of such enterprises. General and local conditions vary so much that the success of a municipally conducted undertaking in one instance might easily be contradicted by the most absolute failure in another, where the conditions are different. It is possible to conceive of a municipality creating and operating its essential public services along business lines which would ensure a better service and a larger monetary return than could be obtained from a private company working the same enterprise under a terminable lease.

It must be admitted, however, that experience has shown that elective municipal councils are not usually able to secure as satisfactory results from the conduct of commercial undertakings as can be secured by well organized private companies. The reasons are many and obvious. In the first place, a commercial enterprise conducted by an elective council, which is continually changing its personnel, cannot have the same continuity of policy and the same determined and persistent striving along well-thought-out and permanent lines. In the second place, an elective council discharging the functions of a board of management of a commercial undertaking, which owes its election to the popular vote of the ratepayers including the customers and employees of the enterprise, is compelled to sacrifice what it knows to be sound business methods of management to public opinion.

With private undertakings we know that capable management is the great factor which makes for success. Without it the largest and wealthiest enterprises are bound to go to the wall. It must be admitted that an elective council, discharging the functions of management of a commercial undertaking, is com-

pelled in many ways to depart from the first principles of business because of demands made by the whole or some portion of the body of ratepayers which elects the council to office. Nor can it be contended, because these demands are made by the ratepayers in whole or in part, that the council should not be held responsible for any business failure which results. It is quite true that it ought not to be the sole object of a municipality to operate its public services so as to make money, but it certainly ought to be the object of every council to give its ratepayers the best service that can be had at the lowest cost. In order to do that, good business management is just as essential as it is with a private enterprise, the only difference being that the profits are represented in the cheapness and excellence of the service instead of in the payment of dividends.

Over-municipalization is another and serious danger always incident to the launching out of municipal corporations into the conduct of enterprises on their own account. A successfully conducted water, gas or street railway service may justify municipalization, but experience in Great Britain has shown that even a small measure of success in the conduct of essential, or popularly used services has in very many cases resulted in a desire on the part of the public to municipalize everything. There are cases, even among the best governed cities of Great Britain, where, because of this popular demand, municipal corporations have gone extensively into speculative enterprises, invading what in Canada is generally conceded to be the field of private enterprise, and pledged the public credit in the expenditure of large amounts of money the return from which is precarious and the investment itself

none too secure. It is only when deficits occur in the conducts of these ventures, which have to be made up out of the rates, that the great majority of the public begin to realize the danger of indulging too extensively in speculative public ventures. This tendency of the public to over-municipalize has been largely contributory to the piling up of the enormous municipal debt of the Mother Country, which many competent authorities claim is today a menace to the whole fabric of municipal credit. Absolute unreliability of municipal accounts is another evil which is placed to the credit of over-municipalization. There is a strong tendency among municipal councils, when an undertaking falls behind financially, to cover up the fact in the accounts, instead of making up the deficiency out of rates, and thereby earning the disfavor of the ratepayers. So serious has this phase of the question become, that the outcome of the investigations of a joint committee of both Houses of Parliament into the whole question of municipal trading, is a report to Parliament recommending the establishment of a governmental system of audit of all municipal accounts.⁽¹⁾

There are reasons why it is often wiser for a municipal corporation to drive a close and careful bargain with private companies to both create and conduct municipal enterprises under franchises which are the property of the ratepayers. If the bargain so made is carefully entered into, it is quite possible that the results of private business management would mean cheaper and more convenient services and larger monetary returns for both the proprietary ratepayers

(1) See Report Joint Committee both Houses of Parliament on Municipal Trading made on July 23, 1903.

and the managing companies, than could be obtained under the less business-like management of elective municipal councils.

It is not the intention in these pages to go into the relative merits of either method, further than to indicate their obvious advantages and disadvantages from the standpoint of the public interest. As it is in all private business undertakings, so it is with enterprises created and operated in the interests of the ratepayers, the general and local conditions under which the enterprise is created and conducted, are of primary importance in making for success or failure. As these conditions vary in different cities and different countries, it is plainly impossible to apply any hard and fast rule as to the general method which ought to be adopted, under all existing conditions, to secure the most satisfactory results.

In considering this question in Canada, we are prone to take successful instances of municipally conducted enterprises in Great Britain as a sufficient criterion, a guarantee of success, for similar enterprises in our own cities. To contend, for instance, that because a productive municipal undertaking in the city of Glasgow may be a commercial and financial success, *ipso facto* a similar undertaking in one of our Canadian cities must also be a success, is a most misleading and fallacious basis upon which to proceed in considering the question of the creation and operation of productive municipal undertakings. It would be just as sensible for an aggregation of capitalists in Canada to embark upon an enterprise for the manufacture of fine West of England and Scotch tweeds, because enormous fortunes have been made out of that industry in Great Britain, without taking into

consideration the important fact that the difference in climatic conditions alone would bring about absolute failure, as it would be for a municipal corporation in any of our Canadian cities to contend that, because the city of Glasgow has made money out of a municipally conducted enterprise, a Canadian municipal corporation would reap a like success from a similar undertaking. Nor is this comparison very much overdrawn; for in a great measure the difference in conditions between Great Britain and Canada, so far as municipal undertakings are concerned, is so great that success in the one instance might easily indicate failure in the other.

It is, therefore, absolutely necessary that all these differences in conditions should be carefully considered, before a financial success which may attend any municipal undertaking in England or Scotland is taken as a guarantee of success for a similarly conducted enterprise in Canada.

CHAPTER II.

THE SOURCE OF MUNICIPAL LEGISLATION, AND GENERAL CONDITIONS IN GREAT BRITAIN.

THE first of these essential differences in conditions between Canada and the Mother Country lies in the source from which all municipal legislation emanates. In Great Britain there is but a single source for all legislation—the Central Parliament at Westminster. In Canada all municipal legislation emanates from the Provincial Legislatures, in which are vested by the Constitution the right to legislate for all rural and urban communities within the respective Provinces.

The Canadian constitution is contained within the four corners of an Act of the Imperial Parliament. It clearly and specifically defines the legislative powers and duties of both the Federal and Provincial Parliaments. The constitution of the Mother Country is the result of the gradual evolution of representative institutions from the comparative absolutism of a paternal monarchy. It is not written in any single document, but is contained in a multitude of Parliamentary enactments upbuilt into a system of government as the process of evolution proceeded. The system of local government in England as it at present exists was evolved in the same manner as the constitution, was in fact an essential and component part of the results of the great struggle of the British people for a representative system of national government.

In the early part of the eighteenth century the laws relating to the local authorities in England possessed neither unity nor solidarity. The historical development of English towns and villages had promoted, not coherence, but diversity of municipal law. The subject was treated and considered under three distinct heads, corresponding to three dissociated and, as it seemed, irreconcilable organizations—the Parish, the Municipal Corporation and the County. The corporations were but isolated patches variegating a network of parishes which spread over the whole country. As units of administration both town and parish were subordinate in power and dignity to the county and the County Bench of Justices. But the town must not be confused with the parish. Towns and parishes are two English types of local community. Each has its distinct characteristics and organization. The parish rests largely upon common law, as well as upon ancient statutes. But the constitutions of the towns differ from one another in accordance with their charters of incorporation which have been acquired at various times and under various conditions. No statute has ever defined a municipal corporation. With the exception of a few which were constituted by prescription, all English municipalities were held to owe their existence as corporate communities to the bestowal of charters by the Crown, which detached them from the parochial government on the one hand and from the county on the other. A cluster of privileges and customs, venerable and valid, granted in these charters, individualized each town and clothed it in its own peculiar garb of law and rights. Many of these charter rights are still exercised in the cities of Great Britain, and form a link between the traditions of the

past, when the King governed, and the democratic institutions of the present, when the sovereign will of the people makes and administers the law.(1)

Though the Reform Act of 1832 and the Poor Law Amendment Act of 1834 introduced important changes and gave a certain amount of continuity and coherence to the system of local government in England, the statutory frame upon which the system hangs today is to be found in the provisions of the Municipal Corporations Act of 1835 (2), which is incorporated with small amendments in the consolidating act of 1882. The principle which underlies the whole organization of local authorities, as at present constituted, is that, while the public administration of local affairs can only be carried on by the local authorities, yet Parliament, which made the local authority, can at any time unmake it, and can at any time confer or take away any power or duty it chooses. If a local authority exceeds its powers or fails to perform its duties, it is responsible for its excess or deficiency in an ordinary court of law. Thus the organization of local government secures the free co-operation of the citizens in the management of their common interests within lines laid down by the central Parliamentary authority. (3)

In a system of local government thus gradually evolved from the experience of the past and carefully upbuilt in accordance with modern democratic institutions to suit every local condition, we have a system which contains all the wisdom and experience of the old with all the utilitarianism and democratic vigor

(1) Local Government in England, Dr. Josef Redlich, p. 112, Vol. I.

(2) 5 and 6 William IV, ch. 76.

(3) Local Government in England, Dr. Redlich, introduction, p. 25.

of the young combined with an adaptability to local conditions and even local prejudices. In Canada our system of local government was fashioned after that of the Mother Country with changes made to adapt it to the different conditions, but it is, as compared with its prototype, a ready-made article containing many imperfections. The fact that all English municipal legislation emanates from the Central Parliament of the nation which is, of course, free from all sectional prejudices, gives it an atmosphere of judicial fairness which could not be expected from similar legislation in Canada which emanates from a Provincial Legislature in which rural and urban jealousies and sectional differences play so important a part. Then again, the greater adaptability of the English system, the wealth of experience which lies in the statutory evolution of its upbuilding, enables British Parliament to so perfect the mechanism of the system that the public interest is more closely safeguarded and more adequately served than under our less adaptable system in Canada.

It is often contended that there is more irresponsibility in the exercise of the manhood suffrage franchise in Great Britain than in a new country like Canada, because of the presence in the latter country of a large element of hereditary and irresponsible poor which is kept from actual starvation by an extensive system of poor relief and publicly supported workhouses. As is the case in every densely populated country in the Old World, the Mother Country has for centuries been compelled to take care of a large amount of this class in its population. In fact the whole structure of local taxation in England is based upon the Poor Rate, which is governed by an

unrepealed statute passed during the reign of Queen Elizabeth.(1) In Canada we have no Poor Rate, no workhouses, and very few deserving poor, but conditions so far as the exercise of the municipal franchise is concerned are in a measure, at least, equalized by a provision in the English law, which stipulates that no otherwise qualified elector shall exercise the privilege of the franchise who has not, first, paid his Poor Law assessment, and, second, who has at any time during the twelve months immediately preceding the election in question, received any relief from monies raised under the Poor Law assessment. In his excellent work on "Glasgow, its Municipal Organization and Administration," Sir James Bell, Bart., Lord Provost of the city for four years, from 1892 to 1896, after describing other reasons for which names are stricken from the Municipal Voters' List, says: "While not an inconsiderable reduction in the Voters' List is produced by these causes, the great source of the deletion of names is the non-payment of the Poor Rates, either from the express exemption of the individual on the ground of poverty or other causes, or by the failures of the persons occupying houses of less than £10 annual rental to pay the rates demanded from them within the statutory period, or by the fact that the person has within the year been in receipt of parochial aid." (2)

The manner in which municipal councils are constituted under the specific terms of general Parliamentary enactments in Great Britain, ensures a degree of uniformity and continuity of municipal policy which

(1) Local Government in England, Dr. Redlich, Vol. I, p. 24.

(2) Glasgow, its Municipal Organization and Administration, Sir James Bell, Bart., p. 62.

does not exist under our Canadian system. All municipal councils in England consist of a Mayor, Aldermen and Councillors. The councillors are fit or qualified persons elected directly by the Burgesses, as the municipal ratepayer is called. They are elected for a term of three years, and a third of their whole number goes out of office each year. The number of the council is fixed in the charter, and varies very widely, though it is usually more or less in proportion to the size of the town. The only general rule laid down by Parliament with regard to number applies to the larger boroughs divisible into wards. When, in accordance with the provisions of the Municipal Corporations Act of 1882, a borough is divided into wards the number in each ward shall be a number divisible by three. (1)

The council is not exclusively composed of councillors, or members directly elected by the ratepayers. Two other elements, aldermen and mayor, are required by law to complete the council. In the words of the statute, aldermen are "fit persons elected by the council, and their number must be one-third of the number of the councillors." Every person qualified to be elected a councillor for a borough is also qualified to be elected an alderman. Elected councillors are also qualified to be elected aldermen; but if a councillor is elected and accepts office as alderman, he vacates that of councillor. An alderman, however, has advantages over a councillor in dignity, in the avoidance of contested election, and in the length of his term of office, which is six instead of three years. Councillors and aldermen together elect the mayor, who is described as "a fit person to be elected by the

(1) Local Government in England, Dr. Josef Redlich, Vol. I, p. 253.

council from among the aldermen or councillors, or persons qualified to be such." Not uncommonly a municipal council, for the purpose of securing a wealthy, titled, or occasionally even a distinguished figurehead, takes advantage of this power to elect as alderman or mayor a man who has had no experience in Municipal work. In many councils, however, a pretty strict rule or custom is observed against the election of outsiders as aldermen. In Nottingham, for instance, a man is scarcely ever advanced to the aldermanic bench unless he has served previously as a town councillor. The office of councillor is regarded as a kind of apprenticeship, and a councillor has to be elected perhaps two or three times before he is allowed to sit upon the aldermanic bench. Indeed, complaints have been made in some towns that aldermen are too frequently ineffective veterans, the office being regarded as a sort of honorary pension, or reward for exhaustion, and the efficiency of the council sacrificed for sentimental reasons. (1)

The mayor's term of office is limited to one year, so that he is the least, as the alderman is the most, stable element in the council. (2)

There is no distinction between councillor and alderman except in the mode of their election, and in the length of their respective terms of office. Their rights are equal, their legal powers are identical. They deliberate and govern in common. They have no power to act separately. There is no such thing as an assembly of councillors, or an assembly of aldermen. No separation is recognized by law, or attempted in practice. The aldermanic office is merely a coveted

(1) Local Government in England, Dr. Josef Redlich, Vol. i, pp. 254, 255, 256.

(2) Local Government in England, Dr. Josef Redlich, Vol. I, p. 255.

distinction, which confers six years immunity from contested elections. In the eyes of the law, the only superiority of an alderman over a councillor, is one which follows naturally from the conditions of his appointment. At an election of councillors for a ward, the returning officer is an alderman, assigned for that purpose by the council. At an election of councillors for the whole borough, the returning officer is the mayor. (1)

The mayor has no administrative duties except those which come to him through custom. He is the official representative of the town, and the presiding head of the council. The case of Mr. Chamberlain at Birmingham is the exception which proves the rule. The administrative triumphs of his mayoralties, simply show what can be done by a strong man in the prime of life, who combines popularity and influence, with business capacity. Mr. Chamberlain was able to transform Birmingham, not because he was mayor, but because he was Mr. Chamberlain. (2)

Continuity of persons and municipal policy is favored by the retirement of councillors by thirds. This is further assisted by the aldermanic system. Instead of the aldermen retiring simultaneously, one-half of the whole number goes out of office every third year, the half to go out being the aldermen who have been in for the longest period without re-election. Each councillor and non-retiring alderman has as many votes as there are aldermanic seats to be filled. The outgoing half of the aldermen may not vote, but the half who remain in office may. This provision is an extreme example of that desire for continuity

(1) *Local Government in England*, Dr. Josef Redlich, Vol. I, pp. 200, 261.
(2) *Local Government in England*, Dr. Josef Redlich, Vol. I, p. 203.

which pervades the English system of municipal government. The result is that when parties are pretty nearly evenly divided, the party in possession, with the help of its surviving aldermen, can often obtain a fresh lease of power, although the elections have placed it in a minority as regards elected councillors. (1)

This necessarily short sketch gives a fair idea of how the local authority in Great Britain is constituted, and what its functions are. Whether such a general system would harmonize with the conditions under which municipalities are constituted in Canada is an open question, but it seems fairly evident that the English system gives a much greater amount of continuity of policy than that under which we in Canada work. Continuity of policy is one of the first essentials to the successful management of a commercial undertaking, whether in the hands of a private company, or an elective municipal council.

There is another important feature in connection with English municipal legislation, which is in a large measure due to the fact that all such enactments emanate from the Central Parliament, and that is, the very great caution which is exercised in granting powers to municipal councils. The extreme reluctance of British Parliament to allow municipalities to bring in omnibus bills asking for many and wide powers, is responsible for the voluminous nature of its municipal legislation. Though Parliament seldom refuses the persistent demand of a municipality for legislation, the care with which it is granted, and the safeguards to the public interest which are insisted upon, is shown by the length and thoroughness of the

(1) *Local Government in England*, Dr. Josef Redlich, Vol. I, p. 256.

investigations made by Parliamentary committees into the application of the corporation of Glasgow, (1) and the corporation of Birmingham, (2) for powers to improve their waterworks systems. In the case of the Birmingham application, the investigations were spread over about five months, and were of a most exhaustive character.

The importance of this safeguarding feature in English municipal legislation is amply shown by an examination of the enactments bearing upon the taking over by the council of the municipal undertakings of Glasgow and their subsequent management.(3)

The enormous amount of detail work, incidental to the handling of all Municipal legislation by the Central Parliament, has resulted in the creation of a department of the Government, the Local Government Board, which is charged with important duties in connection with the granting and carrying out of municipal legislation. In Canada we have nothing to correspond with this Board, and as it plays a very important part, not only in the granting, but in the carrying out of municipal enactments as well, it seems wise to devote a special chapter to a short sketch of its origin, and the part it plays in the field of municipal activity in Great Britain.

(1) Glasgow, its Municipal Organization and Administration, Sir James Bell, Bart., pp. 243 to 253.

(2) History Corporation of Birmingham, C. A. Vince, M.A., Vol. III, pp. 296 to 315.

(3) Glasgow Corporation Waterworks, Acts of Parliament; Glasgow Corporation Tramways, Acts of Parliament; Glasgow Corporation Gas Works, Acts of Parliament; Glasgow Corporation Improvement Trusts, Acts of Parliament; Glasgow Corporation Electric Lighting, Acts of Parliament; Glasgow Corporation Telephones, Acts of Parliament, and Provisional Order.

CHAPTER III.

THE LOCAL GOVERNMENT BOARD, THE BOARD OF TRADE, AND THEIR FUNCTIONS.

THE Local Government Board in England, as it is at present constituted, was the outcome of an investigation into the working of the public health laws by a Royal commission which reported to Parliament in 1871. The report of the commission pointed out that the whole field of local government was overgrown with an almost impenetrable underwood of conflicting jurisdictions, consequent upon the voluntary or permissive principle of previous general legislation, especially upon the question of public health. It was found that the very existence of the laws, as well as the mode of their administration, depended upon the whims of particular towns and districts. The benefits of sanitary science and sanitary laws were only partially adopted. (1) Up to this time there was no strong central authority with control over the sphere of internal administration. The permissive nature of the laws led to a great want of uniformity in their administration, and to a continual conflict of jurisdiction among the various local authorities permitted under the laws to enforce them.

The report of the commission, after advising that the work of local government should be placed in the hands of a single authority in both urban and rural

(1) *Local Government in England*, Dr. Josef Redlich, Vol. I, p. 150.

districts, and that the permissive character of public health legislation should be so changed as to enable a central authority to impose sanitary organizations upon urban districts not hitherto provided, without the consent of the local authority, recommended the creation of a strong board of central control. It proposed that the effete Central Board of Health and the Poor Law Board should be combined in one department of the government, with a staff capable of controlling and inspecting the administration of the sanitary and poor laws alike. This central board was, it was recommended, to have power to compel local authorities to perform their duties in carrying out the laws, and also to issue orders and regulations, binding upon local authorities, with a view to ensuring that the uniformity provided for in the laws should not be lost in their administration. The board was also to have stringent control over the expenditure of local authorities.

Acting upon this report, Parliament enacted legislation creating the Local Government Board. (1) In the following year some of the functions properly belonging to the local government, but previously exercised by the Board of Trade and the Home Office, were transferred to the new board. In the same year, the whole organization of local government, as sketched out in the report, was made law. The enactments on the subject of public health were codified, and the powers of the new board under them carefully outlined in the Public Health Act of 1875.(2). The sphere of this great department has been greatly enlarged and diversified by successive

(1) 34 and 35 Victoria, ch. 70.

(2) 38 and 39 Victoria, ch. 55.

Acts of Parliament, and now includes most of the field usually assigned to a Continental Ministry of the Interior. The Local Government Board has now almost all of the whole apparatus of control over local authorities in its charge. The control of Poor Relief, and the supervision of sanitary administration are its chief duties, and upon these two subjects it exercises the widest authority. But there is a third and financial department in which it exercises control over local loans and the revision by audit of local accounts. Municipal corporations, and joint boards upon which they are represented, are the only local authorities whose accounts are exempted from the Government audit of the board.(1)

The power of the Local Government Board to inspect the finance and administration of local authorities is the hall-mark of centralization as it is understood and practiced in England. Under this general conception comes the whole of the ordinary business of the central authority—to keep itself thoroughly informed of the work of all local authorities and to compel them to furnish proper statistics, to exercise certain statutory rights of confirmation or refusal in respect, for example, of local loans or by-laws, and generally to see that they confine their business and expenditure to the purposes and limits prescribed by Parliament. The power of regulation by order is also possessed by the Board as an auxiliary to that of inspection; but it is only exercised within limits strictly defined by statute. Broadly speaking, the Board performs its functions as a guardian of the public rights and interests without resorting to the imperative mood. Though it has no power to compel a local

(1) Local Government in England, Dr. Josef Redlich, Vol. II, p. 241

authority to carry out the law, or refrain from breaking it, that power is usually exercised by it through the medium of the courts, by issuing a writ of mandamus, or obtaining an injunction. It can only venture to use administrative force in exceptional cases defined by statute, and under forms duly authorized by law. Inspection, taken in its widest sense so as to include inquiry as well as supervision and control, is the ordinary function of the Board; and it is under the form of inspection that the administrative interference of the central authority in the province of local government usually manifests itself. (1)

The Local Government Board is an assistant and not a rival of Parliament, and its sub-legislative powers are strictly subservient to the ends of legislation, and are employed solely for the purpose of ensuring that the statutes shall be accurately interpreted by the local administrators. That its legislative functions are subsidiary to those of Parliament is not surprising when it is remembered that the Board itself is only a department of Parliamentary government. Almost all legislation of a general character affecting local government is based upon bills drafted under instructions from the office of the Board. Accordingly, when details are left by an Act to be settled by an administrative order the object in view is to save time, without impairing the control of Parliament. For, in any case, Parliament would not interfere with technical details involving no question of principle; and an order has the further advantage over a schedule to an Act, that it can be amended or withdrawn without moving in Parliament. (2)

(1) *Local Government in England*, Dr. Josef Redlich, Vol. II, p. 247.

(2) *Local Government in England*, Dr. Josef Redlich, Vol. II, p. 289.

Whether a bill is opposed or unopposed, it is the practice of the Local Government Board to send in a report to the Parliamentary Committee which deals with it. The true position of the Board is that of a subordinate and advisory department, whose vast experience, placed at the disposal of Parliament, is a valuable and efficient safeguard against rash and impolitic proposals which sometimes creep into bills of adventurous corporations.(1)

Over a by-law framed by a municipal corporation for the good government of a town under the Municipal Corporations Act of 1882, there is, strictly speaking, no control exercised by any department of the central Government. Those by-laws which are framed by a municipal corporation, acting as an urban sanitary authority under the Public Health Act of 1875.(2) cannot take effect unless they have been submitted to, and sanctioned by, the Local Government Board.(3)

Some of the most important of the details of the functions exercised by the Local Government Board in connection with productive undertakings established or acquired, and conducted by Municipal corporations, can best be indicated by a summary of the evidence given by Mr. S. B. Provis, C.B., now Sir Samuel B. Provis, K.C.B., Permanent Secretary of the Board, before the joint Parliamentary committee on Municipal Trading, at its session on June 19th, 1900. (4)

(1) *Local Government in England*, Dr. Josef Redlich, Vol. I, p. 241.

(2) *Vide Public Health Act, 1875, sect. 184.*

(3) *Local Government in England*, Dr. Josef Redlich, Vol. I, p. 328.

(4) *Report from the Joint Select Committee of the House of Lords and the House of Commons on Municipal Trading*, pp. 71 to 81.

Questions of municipal trading, he said, came before the Board in three ways; in connection with applications for sanctioning loans by local authorities, in connection with reports which the Board makes on bills which are promoted by local authorities, and also in connection with provisional orders which are issued by the Board under various statutory powers. No reports are made upon any Irish or Scotch bills. The chief purposes for which municipal trading loans are asked are for waterworks, gas works, electric lighting, markets, slaughter-houses, cemeteries and burial grounds, and baths and wash-houses, but occasionally the Board sanctions loans for other purposes which may be regarded as connected with municipal trading, such as piers and harbor undertakings, steam ferries and machinery for the manufacture of paving materials. Some of these loans are sanctioned under the general law and some under local acts. The local acts frequently give borrowing powers for some specified amount which require no sanction from a government department at all, and sometimes they provide that the local authority may raise "such further sum" for a specific purpose—"as may be sanctioned by the Local Government Board." When these applications for loans come before the Board, it first of all considers the statutory powers under which the application is made; then how far the works proposed are of a permanent character. It then considers the limits of borrowing power which the local authority possesses, the propriety of the general scheme, of which it requires particulars, and any local objections to it. If the work is not of a primary sanitary importance, it considers whether the unexpended borrowing powers of the local authority are likely to be required for such

works before authorizing a loan for a work which is not of that nature. Plans and estimates are first submitted to the Board of the work proposed, and then a local inquiry is held by one of the inspectors, at which all persons interested have an opportunity of being heard.

Municipal councils and urban districts have power, under the general law, to provide and conduct their water supplies, and with that object to construct and maintain waterworks, to purchase the undertaking of any waterworks company, to construct reservoirs, and so forth, and to charge water rates. They have power to establish markets, or to purchase the undertaking of an existing market company and charge market tolls and stallages. They can provide slaughter-houses, and make by-laws under which they can charge for the use of them. They can provide cemeteries and sell the exclusive right of burial; and they can provide baths and wash-houses, and make limited charges for the use of them. They have no right, however, under the general law, to provide or control tramways, gas works, electric lighting plants, or telephone systems. Power to create and conduct such undertakings has to be obtained under a local act of Parliament.

The practice of the Board in reporting on bills promoted by local authorities for local acts, is to examine private bills of this kind, which must be deposited with the Board before they are introduced into Parliament. If any of the bills contain provisions which, in the opinion of the Board, call for amendment, the changes are either suggested to the promoters, or, if of sufficient importance, are suggested in a report to Parliament. These reports are only made when there is any deviation of importance from well-established

Parliamentary precedents. Attention would be particularly given, in looking through such bills, to any proposals of a novel character. The reports are usually a sufficient check against the unintentional introduction of any novel powers into statutes.

When a municipal corporation supplies water to municipalities outside its own area, it is the practice of the Board to insist that such supply shall be given in bulk to the outside municipality, and not distributed to the consumers by the selling corporation.

Though the Board does not object to municipalities acquiring and conducting markets, it is opposed to such municipalities supplying ice, for instance, for general use, outside its market undertaking.

In two cases the Board reported against the granting of wide powers to municipalities to run omnibuses in connection with their tramway systems, with the result that both bills were amended so as to limit the powers asked for to the running of omnibuses "along the routes of intended tramways during construction, or re-construction, of any of the existing tramways of the corporation." No general power was given in either case.

Power is possessed by the Board to issue three kinds of provisional orders granting powers to municipalities. The first kind is under the Gas and Waterworks Facilities Act; the second is as to the power of amending local acts; and the third is to enable municipalities to acquire land compulsorily. The power of the Board under the first kind is limited to gas. The Act was originally intended for companies and its extension to local authorities was only made in the case of gas purposes; it was not wanted for water purposes. These orders can apply to either new schemes,

or for the purchase of existing undertakings, but a provisional order cannot be issued to interfere with the existing rights of a company with Parliamentary powers; but sometimes a provisional order is granted giving power to a municipal council to purchase an existing undertaking, but only in the case of an agreement being arrived at between the council and the company.⁽¹⁾ Provisional orders of the second kind are usually to extend borrowing powers granted in a local act, which have been found to be insufficient, but at times provisions have been extended or amended in relation to powers already given by Parliament, such as, for instance, the alteration of market tolls. Provisional orders of the third kind are generally given for the acquirement of land for street improvements, but they have also been given for sewage disposal, for water supply, for hospitals, for pleasure grounds, for offices and for cemetery purposes.

The policy of the Board has always been to encourage municipalities to acquire and operate their waterworks systems, but it does not go out of its way to encourage any other forms of municipal trading. It considers, for instance, that when Parliament has given power to a local authority to establish gas works by a local act, supposing a proper case was made out, such power should be exercised. It would not consider that it was for it to determine whether it was desirable that the local authority should have power or not, but it would not favorably recommend, as it would in the case of a waterworks application. In cases where the Board has considered the circumstances warranted, it has reported against powers being given municipal corporations for undertakings, on

(1) Report of the Joint Committee of the House of Lords and the House of Commons on Municipal Trading, 1900: evidence of Sir Samuel B. Provis, K.C.B., p. 76.

the ground that its sewage and water services were not adequate. Under the Public Health Act, a duty is imposed upon the Board in this respect, and its advice is acted upon by Parliament. In that way the Board has a controlling voice over the objects for which municipal corporations may borrow money. With regard to novel powers asked for by municipalities, if it seems to the Board that it is inexpedient that they should be granted to a municipality, an opinion is expressed to Parliament against granting them. For instance, the Board has consistently objected to municipalities spending money upon advertising the attractions of their towns, and in dozens of cases Parliament has refused to grant such permission.

Statements of accounts of all local authorities are required by law to be prepared and supplied to the Board, and in all cases, except municipal corporations, the accounts are audited by officials of the Board. Municipal councils have their accounts audited by two auditors elected by the council and one appointed by the mayor.

There is another feature in connection with the centralization of local government in England which requires some consideration. The Board of Trade, a department of the central government, is charged, among other things, with supervision of the administration of all general laws dealing with public safety, the rates charged for certain public services, such as lighting and tramway locomotion, whether supplied by a municipal corporation or a private company. In this way we have the anomaly of the Local Government Board supervising the finances, and the Board of Trade the administration of some of the productive undertakings of municipal corporations. The reason

is, that, when the general laws vesting the Board of Trade with such supervisory powers over commercial undertakings were passed, such undertakings were operated only by private companies, and, when municipal corporations entered the field, the Local Government Board continued its functions with respect to finance, and the Board of Trade its duties with respect to supervision. Thus it is that practically all supervision of the central authority over municipal, tramways, electric light, and telephone undertakings, and, to a limited extent, supervision over gas enterprises, is vested in the Board of Trade, while supervision over water, sewage, market, slaughter-house, cemetery, bath and wash-house, and a limited supervision over gas undertakings is vested in the Local Government Board, as well as the supervision of the finances of all municipal undertakings. The powers exercised and the policy followed with regard to the supervision of municipal enterprises under its control, by the Board of Trade, are much the same as those exercised by the Local Government Board. The evidence given by Sir Courtenay Boyle, K.C.B., Permanent Secretary of the Board, before the joint committee of Parliament on Municipal Trading, on May 22nd, 1900, and the memoranda submitted by him on that occasion, give much valuable information upon this subject, which limited space prevents being here quoted. (1)

The control exercised by these two departments of the central government in Great Britain, over the finances, legislation and administration of productive

(1) Report of the Joint Select Committee of the House of Lords and the House of Commons on Municipal Trading, 1900, pp. 3 to 20, Appendixes A, B, C.

municipal undertakings, is not exercised in any corresponding form in Canada. It must be admitted that in so far as this control is a safeguard to the public interests, it makes for the success of such enterprises, while the statistical information gathered by both Boards enables the public to see at a glance the financial standing of any municipal corporation, and the measure of success or failure which attends any of its municipal undertakings.

This completes, in a necessarily brief form, a sketch of the general conditions under which municipal undertakings are created and conducted in Great Britain, and enables one, by comparison with the conditions which prevail in Canada, to estimate how far success in the one instance can be safely taken as a guarantee of a similar success in the other.

CHAPTER IV.

THE EFFECT OF MUNICIPAL TRADING UPON MUNICIPAL DEBT AND CREDIT.

ALTHOUGH Great Britain has the largest national debt of any of the great nations, she is the largest money-lending country in the world. This is due to the enormous wealth inherent in the nation, which enables her, not only to take up her own debt, but in addition, to seek investment for her surplus capital in other countries. Thus it is, that the price of money is said to be made in London.

The abundance of wealth always seeking investment in the Mother Country, makes it an easy matter for even the smaller municipalities to borrow money at low rates of interest. This facility for obtaining cheap money has been a strong inducement to English municipalities to launch out into extensive improvements to municipal institutions, and, during later years, into large commercial and trading ventures, under publicly-owned franchises. The result has been that the funded municipal debt of the country has increased by leaps and bounds. The ratio of increase has been so great that it has caused a great deal of uneasiness among those who watch over the destinies of the Empire. During the session of the Imperial Parliament in the year 1900, the matter was brought to the attention of the Government, and strong opinions were expressed to the effect that the

popular demand of municipalities for power to go into all sorts of municipal enterprises on their own accounts, was so rapidly increasing the municipal debt of the nation, that it was becoming a menace to the whole structure of municipal credit.(1)

The immediate result of this discussion in Parliament was the appointment of a joint select committee of the House of Lords and the House of Commons to enquire into the whole question of the commercial trading done by municipalities, and the effect of that trading upon municipal credit. Much interesting and valuable information was brought out in evidence before that committee at a series of sittings held in the session of 1900, and another held during the session of the past year, 1903.

It was shown that the funded municipal debt of the country at the end of the fiscal year 1899-1900 had reached the enormous amount of \$1,815,319,840, or about fifty-six per cent. of the proportions of the national debt at that time. The following tabulated statement, taken from the evidence given before the committee by Sir Samuel B. Provis, K.C., Permanent Secretary of the Local Government Board, during its sittings in 1903, gives a fair idea of the ratio of increase of municipal indebtedness in England and Wales, with the proportion of that increase which has been due to the launching out of municipalities into commercial ventures under publicly-owned franchises since 1885. (2)

(1) See Debates House of Commons and House of Lords, as reported in the *Times*, London, during the months of April and May, 1900, on the motion to appoint a committee of both Houses on the subject of Municipal Trading.

(2) Report of the Joint Select Committee of the House of Lords and the House of Commons on Municipal Trading, 1903; evidence of Sir Samuel B. Provis, Permanent Secretary of Local Government Board, p. 4.

OUTSTANDING LOANS CONTRACTED BY LOCAL MUNICIPALITIES IN CONNECTION WITH MUNICIPAL TRADING UNDERTAKINGS IN ENGLAND AND WALES FROM 1885 TO 1901.

NATURE OF ENTERPRISE	1885	1898	1901
Waterworks.....	\$151,630,000	\$239,335,000	\$281,275,000
Gasworks.....	68,840,000	91,460,000	103,905,000
Electric Lighting.....		18,370,000	55,330,000
Tramways.....	5,835,000	16,275,000	40,455,000
Markets.....	25,020,000	29,015,000	35,010,000
Slaughter-houses.....	300,000	910,000	1,060,000
Cemeteries and Burying Grounds.....	11,840,000	13,645,000	14,560,000
Harbors, Piers, Docks and Quays.....	142,685,000	171,005,000	186,980,000
Totals.....	\$406,150,000	\$580,015,000	\$718,595,000

Outstanding in 1901.....\$718,595,000

Outstanding in 1885.....406,150,000

Increase in 16 years.. \$312,445,000, or 77 per cent.

	1885	1898	1901
Loans outstanding under above heads...\$406,150,000	\$406,150,000	\$580,015,000	\$718,595,000
Loans outstanding for all other purposes..	459,865,000	730,055,000	864,915,000
Totals.....	\$866,015,000	\$1,310,070,000	\$1,583,510,000

Total Loans outstanding in 1901, \$1,583,510,000

Total Loans outstanding in 1885, 866,015,000

Increase in 16 years.. \$717,495,000, or 82½ per cent.

Loans outstanding for other purposes in 1901.....	\$864,915,000
Loans outstanding for other purposes in 1885.....	459,865,000

Increase in 16 years.. \$405,050,000, or 88 per cent.

NATURE OF ENTERPRISE	1885	1898	1901
Waterworks.....	\$151,630,000	\$239,335,000	\$281,275,000
Gasworks.....	68,840,000	91,460,000	103,905,000
Electric Lighting.....		18,370,000	55,330,000
Tramways.....	5,835,000	16,275,000	40,455,000
Totals.....	\$226,305,000	\$365,440,000	\$480,965,000
Outstanding in 1901.....	\$480,965,000		
Outstanding in 1885.....	226,305,000		
Increase in 16 years..	\$254,660,000, or 112½ per cent.		

NOTE.—Throughout this volume the statistical figures are given in dollars, being in every case changed from sterling money on the basis of five dollars to the pound.

The result of the giving of the evidence contained in these figures, and further information brought out showing the ineffective nature of the system of auditing municipal accounts, where two auditors are elected by the ratepayers and one appointed from the municipal council, induced the committee, in its report on this phase of the subject of municipal trading, to recommend the institution of a new system of audit of municipal accounts under governmental control. The recommendations contained in the report of the Committee are as follows:—

"(a) The existing statutory audits applicable to Corporations, County Councils, and Urban District Councils should be abolished.

"(b) Auditors, who must be members of the Institute of Chartered Accountants, or of the Incorporated Society of Accountants and Auditors, should be appointed by the three classes of local authorities just mentioned.

"(c) In every case the appointment should be subject to the approval of the Local Government Board.

and the auditor, who should hold office for a limited time should not be dismissed by the local authority without the sanction of the Board.

"(d) In the event of any disagreement between the local authority and the auditor as to the salary payable to the latter, the Local Government Board should have the power to intervene." (1)

It is evident from this report, that whatever limits ought to be placed upon municipal trading in England, and that phase of the question the committee did not go into, it clearly held that wherever such trading does exist, ratepayers should not be less fully and continuously informed of the success or failure of each undertaking than if they were shareholders in an ordinary trading company. (2)

The lesson we in Canada can learn from these figures and this report is that municipal trading is liable to involve an enormous increase in the funded municipal debt of the country, and necessitates the creation of a system of municipal audit, very much more thorough than anything which we have at present, as well as some means of obtaining, preparing and making public statistical information regarding municipal finances, such as exists in England in the Local Government Board.

(1) Report of the Joint Select Committee of the House of Lords and the House of Commons, 1903; recommendations of Committee, p. 12.

(2) Report of the Joint Committee of the House of Lords and the House of Commons on Municipal Trading, 1903; preceding evidence p. 13.

CHAPTER V.

LOCAL CONDITIONS IN THE CITY OF GLASGOW WHICH MAKE FOR THE SUCCESS OF ITS MUNICIPAL UNDERTAKINGS.

WHEN it is realized that no less than 229 municipal local authorities, out of a total number of 317 in England and Wales, carry on municipal undertakings of one sort or another, the extent to which the practice is indulged in can be estimated. Even with regard to what are commonly known as the essential utilities, any attempt to go into details with regard to them would be a difficult task, as there are in England and Wales 193 municipal corporations conducting their waterworks; 97 conducting their gas works; 102 conducting electric light supplies and 29 conducting tramways; while there are 228 running markets; 138 operating baths and wash-houses; 43 operating harbors, piers, docks and quays, and 143 running cemeteries and burying grounds.

It would, therefore, be manifestly impossible, in a work of this scope, to attempt to give details as to the manner of conducting, or the measure of success achieved by, productive municipal undertakings in the Mother Country generally. In selecting representative cities in the conduct of whose municipal enterprises the highest average of success has been attained, the city of Glasgow is naturally suggested as typical, not only of the best results so far as Scotland is con-

cerned, but as the most successful example of the conduct of such undertakings in the world. In England a similar obvious choice is not possible. There is no English city admittedly in the position of Glasgow. For the purposes of this work, Birmingham has been chosen, because of all the English cities, it was the first to establish successful municipal undertakings, and because there is no other city in England, so well adapted by its natural conditions to the creation and conduct of enterprises of this kind, owing to the very large contiguous population of the "Black Country" cities and towns which belt Birmingham, and of which that city is the natural centre of supply.

It would be possible to select cities and towns in England, such, for instance, as West Ham, Battersea and Poplar, where there has been an almost criminal abuse of the powers conferred upon municipalities to create and conduct municipal enterprises, but the intention in these pages is to select for careful investigation fairly typical cities in the two Kingdoms, the conduct of whose enterprises has been attended by the highest average of success of any of the cities in Great Britain where such undertakings are carried on.

Just as it would be unfair and misleading to ignore the wide difference in general conditions between the Mother Country and Canada, in considering this subject, with a view to estimating the extent to which success in the one instance could be taken as an augury of success or failure in the other, so it would be unfair and misleading not to carefully point out the difference which exists in local conditions in both Glasgow and Birmingham, as compared with the local conditions in any of our Canadian cities.

In order to get a clear and accurate conception of

the conditions under which the various municipal undertakings in Glasgow are created, and are at present operated, it is necessary to look back into the municipal history of the city. Glasgow has the reputation of being one of the best, if not actually the best, governed city in the United Kingdom, and her municipal enterprises are held up as the best examples of the success with which a municipal corporation can acquire and operate services under the essential public franchises within its limits. It does not require much investigation to convince even the most sceptical that in so far as its enviable reputation for good municipal administration is concerned, that reputation has been well earned. The city government of Glasgow, both with respect to method and the ability and probity with which its municipal business is carried on, is in a large measure unique, even among the best governed cities of Great Britain. It will be found, however, that in addition to the general safeguards to the public interests which, in common with all other cities in England and Scotland, the Parliament at Westminster has thrown around municipal institutions, there are physical and other conditions, peculiar to the city of Glasgow itself, which have in a very large measure contributed to the efficiency of her general municipal administration.

The city of Glasgow, with its outlying locally-governed suburbs, all of which are served by the principal of the municipally conducted services of the city, has a gross population of about one million souls. According to the figures contained in the last census returns, the total population of the city itself is 780,000, and this large population is confined within the extraordinarily small area of 12,700 acres, so that it

will be seen that there is, so far as the bulk of the population is concerned, a very great concentration within a restricted area. The population of the city of Toronto, for instance, is about 260,000, and its superficial area, exclusive of the water area, is 10,800 acres.

This concentration of population in Glasgow is due to several causes, the principal being the confinement of the city proper within a belt of suburban municipalities which have always stubbornly held to their own autonomy, and compelled the city to grow back into itself, instead of expanding its bounds as our Canadian cities do. Many of these suburban towns are as old as Glasgow itself, and at times have been strong enough to threaten the authority of the parent city in municipal matters. In no city in the United Kingdom, except perhaps certain parts of London, is it possible to see greater extremes of wealth and poverty, while in the poorer districts of the city the massing of population is simply amazing. There are literally miles of streets in those districts crowded with large apartment houses, which swarm like rabbit warrens with thousands of families of the poorer class, who live in one or two rooms. Even among the well-to-do wage-earning classes, the same predilection for flat-houses is more marked than in any other city of its size in Great Britain. In the best residential districts, even, it is possible to see whole streets occupied by terrace after terrace of flat-houses of the better sort, where dozens of families use a common staircase to reach their apartments.

This massing of the population within restricted areas gives an enormous advantage in supplying such public utilities as water, light, tramways and such

other services as are used by a large majority of the population. Not only is the capital outlay in all cases smaller considering the numbers of the population served, but the source of revenue per square mile of operation is enormously larger than in any of our Canadian cities. Ample proof of this will be found in the official statements of the number of passengers carried per car mile by the tramways in Glasgow, though the city system includes also a suburban tramway service, as compared with the number carried per car mile by the street railway in Toronto, where there is no suburban service operated by the company which runs cars inside the city. The official statements of the gas enterprise will also show the same thing, instances being common of a single gas service pipe from the street main supplying as many as one hundred families with gas.

Another reason for the success which has attended municipal administration in Glasgow, which is in a large measure peculiar to the city itself, is the cautious and careful manner in which the system of city government has been evolved, from the time when an arbitrary body of civic rulers made up from the merchant and trade guilds were the masters instead of the servants of the people. The ward politician, as he is known and understood in Canada and the United States, has not, and never has had, any place in Glasgow municipal elections. The best and most experienced business men in the city are chosen for, and are glad to serve upon the municipal council. In the first place, such men have more time to give to the public service, because the business firms in Glasgow are for the most part old-established, and require to be conducted only, and not upbuilt, as is necessary with

even the most successful firms in our country. Then again, the Lord Provost, who corresponds with the mayor in our Canadian cities, except that the former has a wider executive power, is nearly always chosen from among the oldest and most prominent members of the council. Only very occasionally has the Lord Provost been selected from outside the council, and then only when the outsider so selected is considered by the members of the council, who elect him, as better fitted for the position than any one of their own number. The Lord Provost, on assuming office, is usually made a baronet by the King. This, of course, is an additional incentive to experienced and wealthy business men to give their services to the city. Then again, both the Lord Provost and the members of the council are elected for terms of three years, one member from each ward retiring each year. This gives a very much greater amount of continuity to the work of council than can be had in Canada where the entire council, including the mayor, is elected each year. While the chief officials occupying positions of monetary trust are subject to election or confirmation in office each year by council, the officials who are entrusted with the management of any municipal undertaking are not only appointed permanently, but are given the widest scope of action in the management of such enterprises. For instance, the late manager of the gas undertaking, Mr. William Foulis, who died during the year 1893, occupied the position of manager and chief engineer for the whole time the enterprise was carried on by the city. When the question of appointing his successor came up, the council advertised that it would pay a sufficient salary to secure

the services of the best man obtainable for the position, though there were dozens of applications from local gas engineers.

Though, by no means all, these are some of the principal differences in conditions between Glasgow and our Canadian cities, which make for good municipal administration, and contribute to the success of municipally conducted undertakings.

The city of Glasgow is suffering, not from any maladministration of its affairs, but from an over-indulgence in municipal trading, which has been carried into the realm of speculative enterprises, which always presupposes a certain amount of risk and the investment of a large amount of capital. For instance, the city of Glasgow is today supplying its citizens with gas, electric light, tramways, and telephones; it controls and manages eleven public parks and picture galleries, thirteen baths and wash-houses, a fruit and vegetable market, a dead meat market, a home cattle market, two foreign cattle markets, a cheese market, a bird and dog market, an old-clothes market, four slaughter-houses, four hospitals and one burying-ground; it is the owner and administrator of two thousand four hundred and eighty-eight houses in flats, seventy-eight lodging houses, a family home, one laundry, one bake-house and one golf course; it is the proprietor of and rents three hundred and seventy-two shops, forty-nine stores, forty-three warehouses, two hotels, one theatre, one studio, one pawn office, one nursing home, one powder mill, one panorama site; it conducts forty-three workshops, twelve halls, nine churches, which belong to the city and have the salaries of the incumbents paid by the city; it farms over one thousand acres of land on which large crops

are grown, including all the feed used in the stables of the street-cleaning department; it converts sewage into solid matter and sells it to the farmers for manure; it carries on business as a market gardener; it owns stone quarries, and possesses nine hundred railway cars; it builds tramcars, has reclaimed bogs, conducts a civic granary, raises something like a thousand pounds a year from the sale of clinkers taken from the crematory refuse heaps, collects and sells waste paper, melts and disposes of the solder taken from old tin cans gathered from the refuse heaps of the city. In fact there is scarcely any limit to Glasgow's municipal activity. This activity, while it may have its commendable side and may be defended on the ground of conservation of the public interests, has certainly helped to pile up an enormous civic debt. There are, of course, substantial assets for all of this debt, but the difficulty is that many of the ventures in which public money has been invested are distinctly of a speculative character. Then, of course, the city, in many of its ventures, has invaded what we in Canada concede to be the realm of the private trader.

A glance at the finances of the city will show what this over-indulgence in municipal trading has done in the way of increasing the funded debt of the city and in raising its rates. In the fiscal year 1890-91 the revenue of the city was \$6,523,200, the expenditure \$6,424,600; in 1900-01 the revenue had increased to \$14,047,025, the expenditure to \$14,232,210. During the same period the debt of the city had increased from \$27,240,135 to \$64,376,095, while the assessable rentals in the city had only increased during the same period from \$17,277,550 to \$24,764,820. Thus, while the city's debt increased by over \$37,000,000 during that period, the assessable

rentals only increased by something like \$7,500,000. In the year 1890-91 the rates were twelve cents in the dollar in rentals of \$50 and upwards, and eight cents and eight mills in the dollar on rentals of less than \$50. In the year 1900-01, the first rate had risen to sixteen cents and four mills in the dollar and the second to thirteen cents in the dollar.(1)

(1) The *Daily Times*, London, England, September 30th, 1902, and a pamphlet written in reply, "The *Times* and Municipal Socialism," Sir Samuel Chisholm, Lord Provost of Glasgow, 1902, both of which agree on figures given here.

CHAPTER VI.

THE MUNICIPALLY CONDUCTED WATERWORKS UNDERTAKING OF THE CITY OF GLASGOW.

THE first attempt made to supply the city of Glasgow with a system of water supply was in 1806, when a bill, partly municipal in its origin and partly promoted by private citizens, was introduced into Parliament and became law, incorporating the Glasgow Water Company. The object was to raise water from the River Clyde and supply it to the inhabitants of the city. Two years later another private company, the Cranstonhill Water Company, also obtained powers to raise water from the Clyde and distribute it throughout Glasgow. For thirty-two years these two companies continued to supply the public needs so far as water was concerned. The Cranstonhill Company, however, was compelled to remove its works from the banks of the Clyde below, to a similar position above the city, on account of the pollution of the lower reaches of the river by sewage. After a precarious existence, the Cranstonhill Company was absorbed by the older company in 1838, under an amalgamation Act from Parliament. At this time the total daily supply from the combined works was about sixteen million gallons a day, or about twenty-six gallons per head of a population of 250,000.

About 1845 the Gorbals Gravitation Water Company secured incorporation and powers from Parliament.

ment to supply the sixty odd thousand inhabitants on the south side of the River Clyde, including Gorbals, Pollockshaws, and Govan, with water taken from the small stream of Brockburn and its tributaries.

In the latter years of their existence the Glasgow and Gorbals Companies were jointly able to supply about 13,500,000 gallons of water daily to a population of about 400,000, which was considerably over thirty gallons per day per head of the population. The real trouble, however, was not the quantity supplied, but the fact that as the River Clyde was becoming more and more polluted every year, there was a general belief that the water taken from it by the Glasgow Company was poisoning the inhabitants.

During the year 1851, the council committed itself to the principle of taking over its waterworks system as a municipal undertaking, and three years later it promoted a bill before Parliament for authority to construct works capable of yielding from twenty to twenty-five million gallons of water a day with possibilities for extensions to further increase the supply so as to meet all the demands of an increasing population. It was proposed to bring the supply from Loch Katrine, a distance of about thirty-four miles from the city. Objections raised by the Admiralty, that the tapping of Loch Katrine would destroy the navigation of the River Forth, which receives its water largely from that source, and upon which there is a naval yard, and another claim that the chemical action of Loch Katrine water upon lead pipes would produce a poisonous effect, resulted in the rejection of the bill by Parliament. Both of these objections having been satisfactorily disposed of, practically the same bill was passed by Parliament in 1855.

Under the terms of this Act the corporation was to take over the plant and works of the two existing companies, paying the Glasgow company annuities at four and one-half per cent. on its ordinary stock, amounting to \$1,518,500, and six per cent. on its preference stock, amounting to \$209,400, and the Gorbals company annuities at six per cent. on its stock, which amounted to \$900,000. In addition, it took over a mortgage debt of the companies amounting to \$380,000. Thus the corporation agreed to pay perpetual annuities amounting to \$135,000 and assume the mortgage debt of \$380,000. Taking the capitalized value of the annuities on this \$2,875,000 worth of stock at twenty-five years' purchase, which would make \$3,375,000 and adding the mortgage debt of \$380,000, the amount paid by the city for the plant and works of the two water companies was \$3,755,000.

The new Loch Katrine water scheme was devised to give the city a pure and practically unlimited supply. The chain of lakes over which the Act of 1855 empowered the council to exercise authority comprised Loch Katrine, Loch Vennachar and Loch Drunkie. The natural drainage of these lakes is into the River Teith, the overflow from Loch Katrine passing into Loch Vennachar, into which the channel from Loch Drunkie also runs. In the scheme it was planned to take the whole water supply from Loch Katrine, leaving to the other lakes of the chain the task of providing the compensation water to be run down the River Teith. Power was given to convert the basin of Loch Katrine into a large reservoir by raising the level of the water four feet above the summer level of the loch, and by draining it down to three feet below that level, thus giving a supply of seven

feet from a superficial area of 3,058 acres. For impounding compensation water, the council was empowered to raise the level of Loch Vennachar five feet nine inches above the summer level and to drain off water to six feet below that level, giving eleven feet nine inches of a supply over an area of 1,025 acres. Loch Drunkie it was authorized to raise twenty-five feet above the summer level over an area of 138 acres. The drainage of Loch Katrine is 23,192 acres, of Loch Vennachar and Loch Drunkie a little more than 24,500 acres. The city was restricted in the Act from taking from Loch Katrine a greater quantity of water in any one day than fifty million gallons, and was bound to send daily down the River Teith from Loch Vennachar compensating water to the amount of 6,480,000 cubic feet or 40,500,000 gallons.

The Loch Katrine district has the advantage of lying in one of the wettest regions in the United Kingdom. Clouds laden with moisture from the Atlantic Ocean, striking against the high hills which lie around and to the west of Loch Katrine, are cooled down and precipitate heavy rainfalls. This average rainfall is estimated at from sixty to ninety-five inches per annum, and the hills being mostly naked rock, a large proportion of the heavy rainfall finds its way rapidly, and with little evaporation, into the several loch reservoirs.

The first instalment of the works, which included the raising of the loch levels, the construction of a twenty-six mile aqueduct from the intake pipe at Loch Katrine to the village of Mugdock, where a sixty acre service reservoir, with a capacity of 488,700,000 gallons, was constructed and the laying of cast iron pipes from Mugdock reservoir seven miles into the

city, was commenced in 1856 and completed three years later.

The cost of this part of the undertaking was \$4,600,000, made up of \$3,857,500 for the aqueduct, reservoir, iron pipes, and the necessary rearrangement of the piping through the streets, \$395,000 for land and compensation, \$135,000 for Parliamentary expenses, and \$210,000 for engineering and other expenses.

The capital expenditure between 1860, when the first instalment of the Loch Katrine works was completed, and 1880, in making additions to and duplications of, portions of the aqueduct and mains into the city, was \$7,270,000. In 1884, it was found that the joint supply from the Loch Katrine works of 10,000,000 gallons a day and from the old Gorbals Company works, which are still operated by the city, of 5,000,000 gallons a day, was not sufficient to supply the needs of the population within the area of demand, which then totalled 762,000. Power was obtained from Parliament to raise the level of Loch Katrine another five feet, and to bring Loch Arklet into the area of supply. This latter loch, though small, lies within a thousand feet of Loch Katrine. The level of Loch Arklet was raised by twenty-five feet, and its water was carried into Loch Katrine by means of a tunnel through the separating hills. The effect of these additions was to increase the water area by ninety-one and a half acres and raise the storage capacity from 5,624,000,000 gallons to 11,908,000,000 gallons, which, with the storage capacity of the Gorbals works of 1,058,000,000 gallons, gave a total available supply of 13,000,000,000 gallons as against 6,682,000,000 gallons from the original Loch Katrine works and the Gorbals works added.

In order to provide for the delivery of this greatly increased supply from Loch Katrine, it was found necessary to duplicate the whole system of aqueducts and mains and construct a new storage reservoir, called the Craigmaddie reservoir, in close proximity to the Mugdock reservoir, with a capacity of 694,000,000 gallons, making the total storage capacity of the two reservoirs 1,182,700,000 gallons. The cost of this work was \$5,455,485.

The old Glasgow Water Company's plant is still used to raise water from the River Clyde for manufacturing purposes, and the city has, in addition, a hydraulic power works for supplying water at high pressure.

The total capital expenditure on the entire system up to 1903 has been \$19,884,850, for the redemption of which debt a sinking fund of \$5,982,850 has been created.

Within the municipality of Glasgow on the north side of the River Clyde, where the power of rating for water is unlimited, the domestic rate in 1860 was about six cents in the dollar on the rental value of the premises supplied; while on the south side of the river the rate was five cents in the dollar on the rental value. The rates were made uniform on both sides of the river in 1871. The domestic rates charged for water during the fiscal year ending March 31st, 1903, were two and two-fifths cents in the dollar on rental value within the city boundaries, and four cents in the dollar on rental value in districts supplied without the city boundaries. Meter rates have also been reduced from a sliding scale beginning at twenty-five cents per thousand gallons, in 1860, to a present uniform charge of eight cents per thousand gallons with a

minimum charge of \$10 per annum; charges for shops and warehouses, private taps, from one to two dollars according to rentals; taps common to more than one tenant, from seventy-five cents to \$1.25, according to rentals, and closets from seventy-five cents to \$1.25. All charitable institutions in the city are supplied with water free of charge, twelve public baths and wash-houses, belonging to the city get free water, and, in return for exemption from assessment of its pipes and mains, the water department does not charge for water used in street cleaning, watering streets and flushing sewers.

The area of the Glasgow waterworks supply covers an area of about twelve miles from east to west and sixteen miles from north to south, and includes, besides the city proper, the Royal burghs of Rutherglen and Renfrew, the burghs of Govan, Patrick, Pollockshaws, Barrhead, Milngavie, Kinning Park, and the towns and villages of Nitshill, Thornliebank, Cathcart, Cardonald, Mount Vernon, Carmyle, Tollcross, Shettleston, Millcross, Bishopsbriggs, Auchinairn, Strathblane, Bearsden, Yoker and Scotstoun. The population within the area of supply is about 1,250,000, and the amount of water supplied during the year 1903 for domestic purposes was about 60,960,235 gallons per day.

The Toronto (Canada) waterworks system, which is owned and operated by the municipality, cost up to the end of 1902 the sum of \$4,956,626. The gross outstanding debt at the same date was \$3,895,094, and the net outstanding debt \$3,259,771, so that the amount of the sinking fund for the redemption of debt, together with the amount of debt paid off out of that fund, is \$635,323. The system is supplying for domestic and

other purposes about 22,000,000 gallons of water daily. An official return ordered during the last session of the Ontario Legislature gives the average annual deficit of the Toronto waterworks system from 1898 to 1902 as \$24,126.

Any comparison between the water rates charged in Glasgow and Toronto is difficult to make. In the former city the domestic rates for water are based upon the rental value of the premises supplied, while in the latter city the domestic rates are based upon the number of rooms and inmates in the premises supplied, with an additional charge for each fixture. For instance, a ten-roomed house in Toronto, with ten inmates, would pay a basic water rate of \$5 a year, with, for instance, \$1.25 extra for a bath, \$1.25 extra for a closet, and 50 cents extra for a wash basin, making in all \$8 a year. A similar ten-roomed house in Glasgow would probably rent for \$375 a year. The water rates on such a rental would be \$7.80 a year, with 75 cents added for a closet, which would make the total rate for about the same conveniences \$8.55 a year as compared with \$8 a year in Toronto. The meter rates in Glasgow are eight cents per thousand gallons, as against fifteen cents gross, or twelve cents net per thousand gallons in Toronto. On this basis, the domestic rate is less in Toronto than it is in Glasgow, while the meter charges are four cents a thousand gallons greater.

CHAPTER VII.

THE MUNICIPAL GAS UNDERTAKING OF THE CITY OF GLASGOW.

IT was in 1818 that Glasgow first used gas as an illuminant. In that year the Glasgow Gas Light Company was formed and obtained powers to manufacture and supply gas within the city proper and some of its adjacent suburban municipalities. The capital of the company was \$500,000, and there was a clause in the incorporating Act providing that so long as it was the only company supplying gas within the city, the annual dividend should not exceed ten per cent. in any one year, and that all surplus earnings above that amount should be devoted to the reduction of the price of gas supplied to consumers. In the year 1835, a board of commissioners, appointed by the town council, found that the gas company owed to the consumers in the city some \$268,940 for profits over the ten per cent. limit, which had not been applied in the reduction of the price of gas. They recommended that the company should be compelled to reduce the price by fifty per cent., but the recommendation was never even seriously considered.

Eight years later, the City and Suburban Gas Company was incorporated and entered the field of competition. Thirteen years later, when both companies applied to Parliament for power to increase their capital stock, the city succeeded in securing provisional contracts with them, under which they agreed

to transfer to the corporation their works, property and funds during the following year, subject to the discharge of all their liabilities, and the payment of perpetual annuities of eight per cent. on the nominal amount of each company's stock, or the purchase of the stock outright at double its face value. The city, however, failed to carry out the agreement.

An investigation into the affairs of the companies, held in 1859, disclosed the fact that the City and Suburban Company had never, throughout its career, earned sufficient profit to pay ten per cent. dividends, although from 1853 down to that time, the maximum division had steadily been made, partly at the expense of premium account and partly by making an insufficient allowance for depreciation on plant and works. In reference to the older company, the Glasgow Gas Light Company, the investigation brought out the serious fact of an enormous loss of gas by condensation, leakage and other untraced causes. For the three years over which the detailed investigation was carried the loss was, in 1858, about 23.29 per cent., and in 1860 it came to 23.19 per cent. A loss of almost one-fourth of the quantity of gas produced, of course, in itself meant a serious addition to the gas bills of paying consumers. The investigation committee in its report recommended the formation of a third gas company, but in 1867, the town council unanimously adopted a resolution in favor of the city taking over the plant and works of the two existing companies. This proposal met with vigorous opposition from the companies, but finally, in 1869, Parliament enacted legislation authorizing the transfer.

Under the terms of this act, the shareholders received perpetual annuities of \$173.810, being at the rate

of nine per cent. on \$1,500,000 worth of ten per cent. maximum dividend stock, and six and three-quarters per cent. on \$575,000 worth of seven and a half per cent. stock. The mortgage debt of the companies, which amounted to \$600,000, was also taken over by the corporation. These annuities, capitalized at twenty-five years' purchase, would amount to \$4,345,250 which, together with the \$600,000 mortgage debt, would make the amount which the city paid for the plant and works of the two companies \$4,945,250.

The works taken over had a producing capacity of 1,206,000,000 cubic feet of gas a year, and the rates charged to customers ranged from \$1.00 to \$1.25 per thousand cubic feet, with a five per cent. discount on all accounts between \$20 and \$100, a ten per cent. discount on all accounts between \$100 and \$500, and a fifteen per cent. discount on all accounts over \$500 a year. The terms of the Act of Parliament, authorizing the transfer and empowering the city to establish its gas enterprise, which is known as the Glasgow Corporation Gas Act, 1869, are well worth reading, not only in order to show the generous terms accorded to two private companies when their enterprises were taken over, but also the care with which Parliament safeguarded the public interests by specifically defining and rigidly limiting the powers granted under the Act.

The corporation entered into possession and began business as manufacturers of gas in 1869. Since that time there has been expended upon the enterprise \$10,340,545. The sinking fund created for the redemption of this borrowed capital, at the end of 1903, amounted to \$2,319,475, and there had been set aside out of revenue at that time for depreciation on

plant and works the very large sum of \$6,548,760. This latter amount represents practically the entire net earnings of the undertaking during the thirty-four years it has been conducted by the corporation, with the exception of a couple of small sums contributed to the Common Good Fund, and loaned to the municipal electric light enterprise in the first years of its existence. Not one dollar, however, of the earnings of the gas enterprise has been applied in relief of the general rates of the city.

It is difficult to conceive of any municipal undertaking being handled upon more conservative lines than has this, the second, of Glasgow's great public ventures. When the plant and works of the two private gas companies were taken over by the city in 1869, it was generally felt that the corporation was assuming considerable risk in endeavoring to run the enterprise, meet the cost of management, pay interest on borrowed capital, and, in addition, provide for an annual payment of \$173,870 of perpetual annuities out of revenue. This public apprehension had a great deal to do with the careful manner in which the Act of Parliament creating the enterprise was framed. Even today, though it is thirty-four years old, the Glasgow Corporation Act, 1869, is still quoted as a model for such classes of legislation.

Whether this conservative management has been fair to the gas consumers of the city during the past thirty-four years or not, is an open question, but it has certainly placed this undertaking of the city upon a financial basis more secure than that of any other similar enterprise in the United Kingdom.

The price of gas to consumers at the end of the year 1903, was fifty-eight cents per thousand cubic

feet for lighting purposes, with a special rate of fifty cents per thousand cubic feet when supplied for motive power purposes. The area of supply included the city proper, with its population of 780,000, and suburban municipalities adjacent, with a combined population of about as much again.

The Consumers' Gas Company of the city of Toronto, which has the monopoly of supplying gas within the limits of the city, charges a flat net rate of eighty cents per thousand cubic feet for all gas supplied, whether for light, heat or power.

CHAPTER VIII.

MUNICIPAL TRAMWAYS IN GLASGOW, HOW THEY WERE ACQUIRED, AND HOW THEY ARE OPERATED.

IT was not intended when tramways were first contemplated in Glasgow that the corporation should have any direct interest in the undertaking, either in the way of constructing the lines or in handling the traffic. When, in 1870, the tramway fever over-ran Great Britain, two rival companies sought from Parliament power to supply the City of Glasgow with a tramway service. The town council opposed both projects, and ultimately an agreement was arrived at under which their bills were amalgamated, and the city secured the insertion of a clause to the effect that, if the bill became law, the promoters should suspend active operations for a period of six months from the date of the enactment, and, if within that period, the Corporation determined to enter into possession, the joint promoters were to stand down, and the town council was to take their place as owner of the legislation with all its powers and responsibilities. The bill was duly passed, the town council within the specified time decided to take over the legislation, and so the duty of making the tramway lines devolved upon the city. The provisions of the Act conferred upon the corporation power either to work the tramways as a municipal undertaking, or to lease them to private companies. There is no doubt this power was given

the City of Glasgow by Parliament through an inadvertence, as there was at this time a standing order of both Houses of Parliament against the granting to municipal corporations of powers to operate such undertakings.

The city decided not to work the tramways itself, and the British and Foreign Tramway Company, which possessed the right to lease under the Act if the city decided upon that course, disposed of its rights to the Glasgow Tramway and Omnibus Company for the sum of \$1,750,000, on the understanding that it was to provide the equipment for the proposed tramways which the new company proposed to operate. It was found later, when the accounts between the promoting and operating companies were examined, that the Glasgow Tramway and Omnibus Company had received property, plant, horses and cars to the value of \$582,120 from the promoting company, while it was paying under agreement, for this equipment and for the assignment of the rights under the lease, the sum of \$1,750,000, making the price of the rights under the lease \$897,880, which represented a dead weight upon the company, for which it had no real assets, and which had to be liquidated by payments out of revenue.

An agreement was drawn up between the corporation and the Glasgow Tramway and Omnibus Company under which the company was to lease the lines to be constructed by the city for a period of twenty-three years for 1871. The company was to provide a working capital of \$100,000, and the city was to begin at once with the laying of the tracks agreed upon. The company was bound to make all repairs and keep up the roadway between the rails and for eighteen

inches beyond the outer rails, and at the termination of the lease to hand over the system in as good a condition as new. For the due implementing of these conditions, the company bound itself to set apart a yearly sum equal to four per cent. of the cost of construction of the lines to be applied in maintenance and renewals, any unused part of this fund to revert to the company at the termination of the lease. The company also agreed to pay the corporation the interest actually paid on the total capital expended upon the tram lines, including all parliamentary expenses, three per cent. per annum on the same capital to be constituted a sinking fund for the redemption of the capital debt, a rental equal to \$750 a mile of street for the lines constructed and actually in use, and reimbursement of the corporation for expenses of management of the undertaking incurred by it. As security for the carrying out of these terms the company was to acquire \$300,000 worth of real property, over which the corporation was to hold a bond and disposition in security. All future extensions of the lines sanctioned by Parliament were to be subject to the same conditions, but the company retained the right to oppose any applications for such extensions from Parliament. A schedule of maximum fares was included in the agreement, which provided, among other things, for the carrying of working people at half fares between five and seven o'clock mornings and evenings. The corporation retained the right to regulate the traffic and the rate at which cars were to be driven as well as the licensing and working hours of drivers and conductors. A penalty clause for non-fulfilment of the terms of the agreement also formed part of the document.

During the first three years of the lease the corporation constructed and the company operated fifteen and a half miles of double track through the most crowded thoroughfares of the city. When the city took over the working of the tramways in 1894 some thirty miles of double track had been constructed and were being operated.

The system of lines was well planned with a view to serving the great traffic avenues of the city. The heart of Glasgow lies in a triangle formed by the three great railway stations, the Central, St. Enoch and Queen Street, and from there the great arteries of communication radiate in every direction to the outskirts. The twelve main tramway routes were so planned that the cars entered the triangle and nearly all passed through it, going from one extremity of the city to the other. Consequently within this circumscribed triangle passengers had an opportunity of proceeding to any quarter of the city served by the tramways.

The capital expended by the city upon the construction of lines during the currency of the lease with the company amounted to \$1,724,825, of which \$1,007,350 was covered by the sinking fund created by the company, leaving a net debt of \$717,475 outstanding when the system was taken over by the corporation. The total capital outlay upon the tramways system from 1871 to 1903 has been \$13,774,275, against which there are accumulated sinking funds amounting to \$776,660, and a depreciation fund on plant, written off out of revenue, of \$3,126,715.

When the tramways undertaking was created in 1871 it was, under the terms of the initial legislation, financed on the credit of the Common Good Fund,

which is really the corporate estate of the city. All the net profits which accrued from the operation of the enterprise during the currency of the lease with the Glasgow Tramway and Omnibus Company, which averaged about \$13,830 a year, was paid into the Common Good Fund. Money required for tramway purposes in Glasgow, is still borrowed on the credit of this fund and the net earnings of the undertaking are still paid into it. Glasgow is the only city in the world which cannot levy a rate for the purposes of its tramway system. Since the conduct of the undertaking has been in the hands of the corporation there has, therefore, always been a grim necessity why the enterprise should be made a commercial and financial success, rather than a drain upon the fund which had to go guarantee for its capital. Fully realizing this fact, and impelled by the knowledge that the enterprise had nothing back of it except its own revenues, the city council has been careful to secure the services of one of the ablest tramway managers in the United Kingdom, to whom is given the widest powers of management, so that the tramway committee of the council is more in the nature of an advisory board than a committee of management.

The total amount of net profits paid to the credit of the Common Good Fund by the tramway undertaking from 1894, when the city took over its management, to 1903, has been \$533,800, or about \$59,312 a year for the nine years. The amount paid to the corporation of the city of Toronto during the past nine years by the Toronto Railway Company for the use of its street railway franchise has been \$1,833,826, or a yearly average of \$203,758. The net earnings of the Glasgow tramways in 1903 were \$125,000; the amount

paid the city of Toronto by the Toronto Railway Company was \$298,839.

When it comes to a question of comparing the relative fares charged in Glasgow and Toronto, it is very difficult to make any fair comparison. In the first place, the Toronto company charges three flat fares for a ride of any distance on its lines and transfers are given over any line in the city to enable the passenger to complete the journey upon the payment of a single fare. These flat fares are four and one-sixth cents for ordinary rides at any time, three and one-sixth cents for rides during limited periods and Sundays, and two and one-half cents for children, or an average fare, exclusive of children's fares, of about four and one-tenth cents for a ride of any distance with the privilege of transfer. In Glasgow there is a graduated scale of fares, beginning with one cent for little over half a mile, two cents for two miles and a third, three cents for three miles and almost a half, four cents for four miles and about a half, five cents for five miles and almost two-thirds, six cents for six miles and about nine-tenths, seven cents for eight miles and almost one-third and eight cents for a fraction over nine miles. Thus the average fare paid per mile is a fraction less than a cent. In the second place, while the Toronto system is purely an urban system, that of Glasgow is urban, suburban and inter-urban, comprising one hundred and nineteen miles of single line and serving a population of 780,000 in the city proper, and 292,000 outside the city, distributed as follows:—Shettleston, 12,000; Tollcross, 8,000; Canbuslang, 13,000; Rutherglen, 18,000; Cathcart, 5,000; Pollockshaws, 12,500; Kinning Park, 14,000; Govan, 89,000; Paisley, 80,000; Renfrew, 10,000; Clydebank,

21,000; Bishopsbriggs, 10,000. Total, 292,000. The population served by the Glasgow tramways is thus 1,072,000.

The fact that the average fare paid per passenger on this whole system is less than a penny shows that, while the number of passengers carried per car mile is only 12.64, the traffic in the city proper is much larger than that figure would indicate, as the average ride on the tramway system, including its suburban and inter-urban lines, is a little less than a mile. This is further borne out by the fact that over thirty-two per cent. of the passengers carried pay halfpenny fares, and sixty-one per cent. pay penny fares, so that ninety-three per cent. of the total number of passengers carried do not travel on the cars for a longer distance than two and a third miles. The Toronto Railway Company carries 4.56 passengers per car mile at an average fare of four and one-tenth cents. It is evident, therefore, that while a small average fare for a short average ride makes money for the Glasgow tramways because of the congestion of population within the city proper, the same small average fare for the same short average ride would be of no use in Toronto at all. In Glasgow, it costs eight cents to ride a fraction over nine miles, while in Toronto a ride of any distance served by the system, and equal, if desired, to Glasgow's nine miles, costs an average fare of four and one-tenth cents, with the privilege of transferring from one car line to another as often as is necessary. In Glasgow it costs a cent to ride a little more than half a mile and two cents for a little over two miles, while in Toronto it costs the same average fare to ride either of these distances, as it does the longest distance the system covers. It is hard to de-

termine which fare, or system of fares, is the cheapest. but it is obvious that the system of fares which produces revenue in Glasgow would not produce revenue in Toronto, and *vice versa*. What suits one set of conditions would be impossible under the other.

CHAPTER IX.

THE MUNICIPAL ELECTRIC LIGHT AND TELEPHONE UNDERTAKINGS OF THE CITY OF GLASGOW.

THE municipal council of Glasgow first began to supply electric light to its citizens in 1892, when it took over a small plant belonging to a private company, installed primarily to light some of the public buildings in the city. At the time of the transfer, which was authorized by Parliament in the Glasgow Corporation Electric Lighting Order, 1890, the plant was supplying thirty-seven customers. The price paid by the city was \$75,000. There were two generating stations, one on the low tension continuous current system of one hundred volts conveyed by overhead wires, and the other, which was also conveyed by overhead wires, was on the high tension alternating system of two thousand four hundred volts transformed on the consumer's premises to one hundred volts. When the corporation took over the undertaking in 1892, work was at once commenced upon a central generating station for low tension supply. The low tension continuous current three wire system, at two hundred volts pressure, was adopted to save the cost of altering the existing installations of consumers, which could be connected with the new system without changing lamps. All the mains from this new generating station were placed in underground conduits. In the following year the high

tension alternating plant was shut down, all consumers being changed over to the new low tension underground mains supplied from the new power station.

In 1896, in order to meet an increasing demand for current, two temporary accumulator sub-stations were erected, partly to avoid transmitting heavy loads from the central generating station during the longest lighting hours, which involved considerable loss at the low pressure of two hundred volts, or a large expenditure on extra heavy copper mains, and partly to relieve the maximum load upon the central generating plant. The accumulators in the sub-stations were charged up during the night and the early hours in the morning when the plant and mains were under an easy load, and discharged during the hours of heaviest demand to supply the local districts around the sub-stations. This expedient, however, was soon found to be insufficient, for in the following year the erection of two new power stations, one in the north and the other in the south side of the city, was begun. They were designed to contain a capacity of 35,000 horse power, of which there was installed about 16,500 horse power. Just before the new stations were opened in 1898, the regulations of the Board of Trade were changed to allow pressure to be given consumers of electric energy to be raised to two hundred and fifty volts. The corporation immediately took advantage of this alteration to generate at higher pressure, as it reduced the cost of the mains in proportion to the amount of power carried. From the new power stations the pressure supplied is two hundred and fifty volts a side, on the three-wire low tension system, motors above five horse power being supplied

at five hundred volts. In 1890, when the municipality of Kelvinside was added to the city, the corporation purchased a small electrical plant, which had been supplying a small portion of Kelvinside with light, for the sum of \$185,000. Up to the present time, 1903, the corporation has obtained the bulk of its revenue from supplying electric current in the business centre of the city and in the outlying portions where new buildings are going up. As yet, however, electricity has not to any appreciable extent taken the place of gas as the popular lighting system in the crowded residential sections of the city, because in so many instances gas is used for lighting, heating and cooking in apartment houses, where it is a great convenience.

A serious and costly mistake was made in the initial years of the enterprise by installing a totally inadequate system of conduit mains, which have since been abandoned, and a new and larger system installed at great cost.

The amount of capital expended upon the undertaking since it was taken over by the corporation has been \$5,208,725, the accumulated sinking fund amounts to \$180,765, and the total profits, over and above the cost of operation, have been employed in building up a fund for depreciation on plant amounting to \$480,835, an amount which is regarded as altogether too small, considering the fact that a great deal of capital has been expended upon a useless and abandoned system of conduit mains.

In the first year of the operation of the enterprise by the corporation there was a fixed rate of fourteen cents per Board of Trade unit(1) charged for the

(1) A Board of Trade unit is equal to 1,000 watts one hour.

current supplied. In 1897 the system of charging was altered from a flat rate to a maximum demand rate. The initial charge for the maximum demand quantity (three hundred and sixty-five hours' use) was twelve and a half cents per unit. All current taken over that quantity was charged for at the rate of eight and a half cents per unit. The average price received that year for the total amount of current supplied was ten and a half cents per unit. The initial rate of twelve and a half cents per unit is still charged to consumers who do not use more than the maximum demand quantity. To larger consumers a reduced rate is charged on all current used over and above the maximum demand quantity, this reduced rate being, in 1903, a penny a unit. The amount of electricity sold in 1903 was 11,501,324 units.

The Toronto Electric Light Company has an output about equal to that of the Glasgow enterprise. The rates charged vary from twelve cents per unit to small consumers down to four cents to very large consumers. There is, however, a rate to dwelling houses and some other classes of consumers of eight cents per unit, which applied no matter how small an amount is used, and which has proved very useful in affording lighting facilities to dwellings of all classes and to churches and other public institutions and places of public meeting. The Toronto company also renews the lamps of its customers free of charge.

The latest of Glasgow's municipal ventures, the corporation telephone undertaking, was established in 1900. The question was first discussed by the city council in 1893, when a committee was appointed to consider the question of the advisability of the corporation making application to the Post Office department.

which has the control and licensing of all telephone companies in the United Kingdom, for permission to establish and conduct a telephone exchange within the limits of the city. The committee reported in favor of the application being made.

At this time the only telephone exchange in Glasgow was that of the National Telephone Company and the service, it was claimed, was both inadequate and unduly expensive. The chief spirit in the move made by the corporation was the late Lord Provost Sir Samuel Chisholm, and it is alleged that political considerations entered largely into the fight which was made against the National Telephone Company and for the establishment of a municipal telephone system. However that may be, after application was made to the Postmaster General, two years were spent in correspondence, after which a Parliamentary committee conducted an inquiry into the question of granting licenses to local authorities to construct and operate telephone exchanges, before which evidence was given as to the merits of the Glasgow application. No result followed until 1897, when the government consented to hold a local investigation into the complaints against the National Telephone service, which were the basis of the application made by the city. The Royal Commissioner reported in favor of the municipal application being granted, but the Postmaster General was still obdurate, and refused to grant the license. In the following year, another committee of Parliament, after taking evidence on the question whether local authorities should be permitted to create and operate telephone exchanges, reported that a general and immediate competition, either by the Post Office Department or by local au-

thorities, was necessary, owing to the general unsatisfactory service given by the National Telephone Company, which conducted exchanges all over the United Kingdom.

About the end of 1898, the corporation made another application for a license, this time not only for the city, but for the whole of what is known as the Glasgow telephone area, comprising outlying districts as well. After considerable delay, the Postmaster General intimated that he was prepared to grant the license, provided the corporation obtained power from Parliament to construct and work a telephone exchange. Accordingly, the city presented a bill to Parliament asking for these powers, but, before it reached the committee stage, the government introduced a general bill, known as the Telegraph Act of 1898, in which, among other things, it reserved the right of purchase of all telephone plants thereafter established, for the creation of a national telephone system to be run in connection with the post office and telegraph services.

The corporation, as soon as this bill became law, made another, and this time a successful application for a license, which was granted in 1900, for the whole of the Glasgow telephone area, which embraces portions of the four counties of Lanark, Renfrew, Dumbarton and Stirling, and which covers approximately one hundred and fifty-three square miles. The license, however, contained the following proviso:—"On, or as soon as may be after, the 31st of December, 1913, the Postmaster General shall buy, and the local authority shall sell and convey, all such plant as is, at the date aforesaid, in use by the local authority for the purpose of supplying the means of telephonic

communication under these presents, and as is suitable for the actual requirements, at the date aforesaid, of the telephone service of the Post Office, within the licensed area. No plant shall, in any case, be considered suitable for the requirements of the telephonic service of the Post Office, which has been brought into use without the sanction in writing of the Postmaster General, but, as aforesaid, if any question arises as to the suitability of any of the plant of the local authority for the requirements of the telephonic service of the Post Office within the licensed area, such subject shall, in case of difference, be decided by arbitration. The value of all plant purchased by the Postmaster General under the foregoing articles shall be deemed to be its fair market value at the time of purchase, due regard being had to the nature, and the then condition, of such plant, and to the state of repair thereof, and to the circumstance that it is in such a position as to be ready for immediate working, and to its suitability for the purposes of a telephonic service, and no addition shall be made to such value in respect of compulsory purchase, or of good will, or of any profits which might have been, or be made by the local authority from the use of such plant. In the case of difference, such value as aforesaid shall be determined by arbitration. All matters which, in pursuance of the conditions herein contained, are to be determined by arbitration, shall be referred to an arbiter to be mutually agreed upon by the Postmaster General and the local authority, and failing such agreement, to be appointed, on application of either of them, by the Board of Trade."

As soon as the city obtained this short lease of life

for its municipal telephone franchise, work was at once begun upon the establishment of an exchange. The capital expended at the end of 1903 amounted to \$1,354,690, and the number of subscribers to the system was some nine thousand. All the net earnings of the enterprise have been devoted to building up a depreciation-on-plant fund of \$10,460. The amount expended upon capital account includes some \$50,000 spent in preliminary expenses in procuring the license. In the discussion which took place in the city council in 1903 over the annual statement of accounts, Baillie Burrell, a member of the telephone committee, estimated that, in order to come out even at the termination of the telephone lease of life, the city would have to write off for depreciation of plant during the next ten years \$740,000, or about \$74,000 a year. This he had no expectation could possibly be done, even allowing widely for the natural growth of the revenue of the undertaking. (1)

Inasmuch as not more than one in sixty of the population of Glasgow ever use a telephone at all, the undertaking has never been popular with the majority of the ratepayers, who have been afraid that the enterprise would result in financial disaster, and that the loss would have to be made up out of the rates. It was for this reason, more than anything else, that Sir Samuel Chisholm left the city council after he had accomplished the establishment of the municipal telephone system and despite the fact that its establishment immediately had the effect of compelling the National Company to reduce its rates by one-half to meet the competition. The trouble, even with those

(1) Report of Council meeting, Glasgow *Morning Herald* Sept. 3rd, 1903.

who have to use telephones in Glasgow, is that, while the rates have been reduced to one-half what they formerly were, it is necessary for every business man to have two instruments instead of one in his premises, so that it costs him the same as formerly, and gives him twice the trouble.

The cost of telephones in Glasgow is \$26.25 a year for an unlimited service, and \$17.50 a year for a limited service, when two cents a call is made on the caller only using such instrument.

The Bell Telephone Company in the city of Toronto charges \$45 for an unlimited office service and \$25 for an unlimited house service per annum. There is no basis of charge for a limited service, but special facilities such as desk telephones, office exchange systems and other conveniences are supplied at rates proportionate to the extent of such extra services.

CHAPTER X.

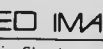
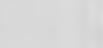
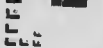
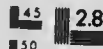
LOCAL CONDITIONS WHICH AFFORD POSSIBILITIES FOR THE SUCCESSFUL CONDUCT OF MUNICIPAL UNDERTAKINGS IN THE CITY OF BIRMINGHAM.

THE city of Birmingham has long had the reputation of being the first and the principal exponent, among the cities of the United Kingdom, of successful municipally-conducted undertakings. This reputation, well earned in the beginning, was due to two principal reasons. The first, was the exceptional natural position of the city as the centre of what was, at that time, the greatest manufacturing district of Great Britain, and which is still one of the most densely populated centres in England. This exceptional position of the city of Birmingham will be better understood when it is explained that the population of the three counties, into which portions of the city extend is, Staffordshire, 1,251,000; Warwickshire, 906,000; Worcestershire, 500,000, or in all a total population of 2,850,000. This populous district, of which Birmingham is the centre or parent city, is known as the "Black Country," at one time the largest iron and steel producing region in the world. Of latter years, this enormous industry has largely left the "Black Country" for districts further north, where iron and coal are found in larger contiguous quantities. But even now, despite the falling off of its great



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industry and the consequent decrease in its population, the "Black Country" is still one of the busiest and most populous of the great workshop districts of England. It would be impossible to conceive of any city in the world more admirably suited for the creation and operation of successful municipal undertakings than is Birmingham.

The second reason for the success which has attended the early launching out of the city of Birmingham into municipally conducted enterprises, was the energy, ability and foresight displayed by the Right Hon. Joseph Chamberlain and those associated with him in the administration of the affairs of the city, in the days when Birmingham was the pioneer in the creation and conduct of municipal undertakings. In 1869, when Mr. Chamberlain was first elected a member of the Birmingham town council, as it was then called, the affairs of the community were in the hands of a class of representatives who were in the habit of discussing and often deciding municipal business in the "pot houses" of the city. Mr. Chamberlain at once gathered about him a strong municipal party in the council, and by 1874, when he was elected mayor, the best elements in the population were serving under his leadership. Then followed the carrying out of the great schemes for the municipalization of the gas and water franchises, and for the extensive improvement of the city, whereby squalid slums in its very heart, which were dangerous for a stranger to visit at any time and a veritable hell after nightfall, were converted into what is now the most imposing business centre of the city.

Under Mr. Chamberlain's energetic and skilful guidance, from 1874, when the city began negotia-

tions which resulted in the acquirement of the gas and water services by the corporation down to 1880, when that gentleman finally left the service of the city to accept office in the Imperial Government, the city of Birmingham acquired a reputation throughout the whole of Great Britain for the ability and enterprise which characterized its municipal government.

From that period, however, down to the present time, the city has been doing little more than living upon its reputation. The great schemes of municipalization initiated during the years of Mr. Chamberlain's municipal activity, and placed in a position which made their failure almost an impossibility by his genius and the splendid work done by the corps of able municipal rulers he gathered about him, have in the main been successful, though lax business management in latter years has done a great deal towards making a partial failure of enterprises which at the time of their creation gave undoubted proof of enormous possibilities of success.

As a matter of fact, it does not require much investigation into the municipal history of Birmingham to convince one that since Mr. Chamberlain left the municipal arena the ability and enterprise which marked the establishment of its early reputation have been wholly lacking, and that the great possibilities which lay before the undertakings initiated during his regime as Chief Magistrate have not been realized.

The revenue of the city in 1892-93 was \$3,215,455. in 1902-03 it had risen to \$11,310,075; the expenditure in 1892-93 was \$3,188,590, and in 1902-03 it had risen to \$11,325,075; the charges on capital account

were in 1892-93 \$1,273,880, and in 1902-03 \$2,235,165. The city debt was \$44,306,220 in 1892-93, and had risen to \$66,815,460 in 1902-03, while the assessable rentals increased from \$6,787,660 in 1892-93 to \$13,795,160 in 1902-03. The rates of taxation were twenty-two cents and four mills in 1892-93, while in 1902-03 they had risen to twenty-seven cents and four mills in the dollar on the assessable rentals.

This enormous increase in the city debt of \$22,509,240 in ten years has been mainly due to the cost of the new waterworks scheme for supplying the city with water from Wales, work upon which was commenced in 1892.

CHAPTER XI.

THE MUNICIPAL WATERWORKS SYSTEM OF THE CITY OF BIRMINGHAM.

THE problem of supplying Birmingham with water has always been a difficult one. Previous to 1875 the city was supplied by a private water company, which drew its supply from four small streams and five wells. The area of distribution comprised 54,209 acres, including the city of Birmingham, Kings Norton, Yardley, Handsworth, Harborne, Aston and Northfield parishes, with a combined population of 1,250,000. The total supply of water was 17,300,000 gallons a day, with a storage capacity in an extensive system of reservoirs of 197,000,000 gallons.

As far back as 1845 the corporation began insisting upon purchase clauses being inserted in the legislation asked for by the company for further borrowing powers. Negotiations with the company, applications to Parliament, and every conceivable means was employed at various times to secure control of the company's plant and works, without avail. It was not, however, until Mr. Chamberlain became Mayor of Birmingham, that successful negotiations were instituted, which finally, after a great deal of trouble, resulted in the city securing control of the existing waterworks system. It was almost entirely due to Mr. Chamberlain's steadfast determination that the city should own and control its waterworks system,

that the company was finally brought to time, and reluctantly consented to the enactment by Parliament of legislation under which it handed over its works and plant to the city in 1876.

The authorized capital of the company at the time of the transfer was \$4,725,000. Under the Parliamentary enactment authorizing the transfer, this capital was converted into perpetual annuities amounting to \$272,455. These annuities capitalized at twenty-five years' purchase, though they are worth much more than that now, would amount to \$6,750,000. It was universally recognized at the time that the water company had at all times acted with courage, forethought and high-minded recognition of the rights of the citizens. The only reason advanced for taking over the system was that it was felt that, no matter how well served, such a prime necessity to the population as a pure and adequate water supply should no longer be left to private control, or dependent upon conditions of private profit.⁽¹⁾ From the time it was taken over by the city down to 1890, there was expended upon improvements and extensions to the system considerably over a million of dollars. The average daily yield was increased from 8,300,000 gallons a day to 16,820,000 gallons a day.

In the year 1891, however, the council found itself face to face with a serious condition of affairs. The average demand, it was estimated, would in three years exceed the maximum yield of the system. To further increase that yield meant the expenditure of \$5,000,000, which would then only provide for twenty years' expansion, and even then there was a danger

⁽¹⁾ History of the Corporation of Birmingham, J. T. Bunce, F.S.S. p. 400.

of exhausting the last of the contiguous areas of supply.

After much careful consideration, the council adopted an extensive and costly scheme for bringing the city water supply from Wales, a distance of some eighty miles. The scheme included the construction of six enormous reservoirs in the valleys of the Elan and Clae wen rivers, up among the Welsh moorlands, where there was a large and practically unoccupied drainage area. From these great storage reservoirs, it was estimated that a maximum supply of pure water could be obtained of 67,500,000 gallons a day, enough, it was contended, to supply all the possible needs of the city and its surrounding water supply area until 1960. The new system was to be constructed in two instalments. The first, which it was proposed to have completed in 1902, would, it was estimated, yield a daily supply of 27,000,000 gallons, enough to cover the immediate needs of the city, at any rate until the remaining instalment could be completed. The chief works in the complete scheme, besides the storage reservoirs in Wales, were an aqueduct or conduit from the storage reservoirs to a place called Frankeley, where a distribution storage reservoir was to be constructed on land sufficiently high to allow of the distribution of the water from it by the force of gravitation to all parts of the area of distribution in and about the city, except one or two of the higher districts, which it was proposed to supply by pumping to special reservoirs. The construction of this conduit was to differ according to the elevation of the ground traversed. It was to be either a tunnel through high ground, a cut-and-cover, when it could be carried over ground of the right elevation, or iron conduit

pipes, when it crossed depressions. It was proposed to make all the tunnels and cut-and-covers large enough to convey the maximum supply of 67,500,000 gallons a day. Five forty-four inch pipes, it was estimated would be required to carry this maximum flow of water, where pipes instead of tunnels and cut-and-covers were used. Of these five lines of pipes, it was proposed to construct only two at first, supplying the initial quantity of 27,000,000 gallons a day, and to add a third, fourth, and ultimately a fifth line as required, until the maximum yield was reached. For the first instalment of the system, giving a daily supply of 27,000,000 gallons, three only of the six Welsh reservoirs were to be necessary. The estimated cost of the completed system was \$28,274,790. and for the first instalment, \$16,703,500. In order to meet the immediate demands it was also intended to spend \$1,406,250 on the old waterworks system.

There was a long and bitter struggle in council before this scheme, involving the expenditure of such an enormous amount of money, was adopted, and Parliament subjected the bill which was afterwards presented to a long and searching inquiry before a special committee of both Houses. Finally, in 1892 an Act authorizing the construction of the new waterworks system was passed by Parliament, empowering the city to borrow not more than \$30,000,000 for the purposes of the work.

All the work in the Welsh valleys was done by day's labor on account, it is alleged, of the responsibility which the council felt was laid upon it in constructing dams, especially the great Caban Coch dam, at the lower end of the system of reservoirs, in such a way as to ensure absolute safety. This dam rises 122

feet above the river's bed, its thickness at the base is 122 feet, and its length across the top is 600 feet. The number of workmen employed by the corporation on these works is from twelve to fifteen hundred, and for their accommodation, in 1894, a wooden village was built near the works. This village is run by the corporation, the men are supplied with lodging houses, are fed and supplied with all necessities from corporation stores, and there is even a municipal public house where, under certain conditions, the workmen may obtain spirituous liquors. All the remainder of the work is being done by contract.

No definite report of the cost or progress of the work on the new system was given to the public until 1902, when the first instalment, under the terms of the Act, was to have been completed. It then came out that not only was the first part of the system very far from completion, but that, uncompleted as it was, it had cost \$29,424,590, or \$10,247,840 more than was estimated, and \$1,149,800 more than the estimated cost of the entire completed system. The city has now a bill in course of preparation, in 1903, for presentation to Parliament, asking for further borrowing powers in order to complete the work, the first instalment of which, it is now expected, will be ready for use about the end of 1904. Though no official estimate has ever been given out, it is generally conceded that the entire system will cost something like \$75,000,000 before it is completed, or nearly three times what was estimated.

Up to the present time, 1903, the combined water systems of Birmingham have cost \$35,497,480, the gross profits have been \$13,581,705, the charges on capital account have been \$13,658,245, the net profits

have totalled \$986,540, and the net losses \$1,063,080, so that there is a balance on the wrong side of the ledger of \$76,540 up to the end of 1903. (1)

The rates charged for water in Birmingham at the end of 1903 were, for domestic purposes, graduated scale for occupiers according to weekly rental or net annual value:—Not exceeding \$25 rental, \$1.50 a year; between \$25 and \$37.50 rental, \$2 a year; between \$37.50 and \$50 rental, \$2.50 a year, and so on up to houses of between \$200 and \$300 rental, which pay \$14.25 a year. Exceeding \$250 in amount the taxes are computed on a basis of six per cent. on the net rental value. Baths in houses under \$125 a year rental, \$1.50 a year; from \$125 to \$250 rental, \$2 a year. Water closets beyond the first, \$1 a year. Charges to landlords for domestic purposes are slightly lower in cases of premises which rent for more than \$50 a year. Charges for retail shops and offices, minimum, \$12.50 a year and three per cent. on the annual rental over \$250. By meter, fifty cents per thousand gallons, and less as the quantity increases over ten thousand gallons. (2) These rates are, roughly speaking, about one cent and six mills more in the dollar than was charged in 1873, when the original system was taken over by the city, with the prospect of future increases before the new works are completed. Despite the fact that the water rates have been thus increased, the citizens are compelled in many instances to get their water from private wells, owing to the inadequacy of the existing system of supply.

(1) Report Birmingham Water Committee, May 19, 1903, Appendix P.

(2) The Municipal Year Book for 1903, p. 161.

CHAPTER XII.

THE CITY OF BIRMINGHAM'S MUNICIPAL GAS UNDERTAKING.

THE first practical use of coal gas as an illuminant was made in the city of Birmingham as far back as 1798, when a series of successful experiments was made in lighting a portion of one of the large factories near the city. The earliest public display was an illumination made in the city of London on the occasion of the signing of the Peace of Amiens in 1802. Five years later the first public use of gas was made by the lighting of Pall Mall in London.

Previous to 1875, the city of Birmingham, with many of its contiguous outlying municipalities comprising a population of nearly a million, was supplied with gas by two private companies, the Birmingham Gas Light and Coke Company, incorporated in the year 1819, and the Birmingham and Staffordshire Gas Light Company, incorporated in 1825. In that year, through the exertions of Mr. Chamberlain, Parliamentary authority was obtained for the ratification of an agreement between the city and gas companies for the taking over of their plants and works. When the bill was before Parliament, the outlying municipalities, which had previously been supplied by the companies, succeeded in having a clause added giving them the option of purchasing the distributing plants within

their own bounds if they so desired. Many of these municipalities have since taken advantage of this option to purchase their distributing plants from the corporation.

The capital of the companies at the time of the transfer was, of the Birmingham Gas Light and Coke Company \$1,934,380, and of the Birmingham and Staffordshire Gas Light Company, \$3,403,905. The terms of purchase under the Act were that the Birmingham Company was to receive \$2,250,000 for its plant and works, and some \$147,500 for a share of the profits during a portion of the year after its works were taken over. Shareholders in the company, entitled to some \$684,000, elected to take corporation debentures at four per cent, for a limited term of years. The Staffordshire Company was to receive perpetual annuities of ten per cent. on \$1,602,000 worth of its stock and perpetual annuities at seven and a half per cent. on \$1,750,000 worth of its stock, making perpetual annuities of \$291,450, which capitalized at twenty-five years' purchase amount to \$7,286,250, and some \$519,225 for a share in the profit during a portion of the year after its works were taken over. At the end of the year 1875, the council reported that the capital expenditure on the enterprise, including all cost of purchase with annuities capitalized, had been \$10,004,655. The rates charged for gas to consumers at this time were from eighty-seven to seventy-five cents per thousand cubic feet, and the amount supplied was some 2,319,596,800 cubic feet. In the following year the price of gas was reduced so as to range from eighty-one to sixty-eight cents per thousand cubic feet, in consequence of the corporation clearing a net profit out of the enterprise of \$170,610

during the year. The next reduction in the price of gas took place in 1879, when the price was made to range from sixty-two to seventy-five cents per thousand cubic feet. Again, in 1881, the price was reduced to a schedule ranging from sixty-eight to fifty-six cents, and in 1884 it was again reduced to a schedule from sixty to fifty-two cents per thousand cubic feet. From this time on the price began again to increase. In 1887 the schedule was raised so as to range from sixty-four to fifty-six cents; in 1900 the schedule extended from sixty-four to fifty cents, and in 1903 it had risen to a basis of prices ranging from sixty-eight to fifty-six cents per thousand cubic feet.

During the period from 1884 to 1889 the sum of \$1,840,500 was added to the sinking fund, and \$213,890 to the reserve fund, making \$2,054,390 added to the combined fund for the redemption of the capital debt, while only \$524,785 was added to the debt itself. The result of this upon the net outstanding debt was that while in 1884 it stood at \$10,803,900, in 1900 it stood at \$9,448,415. The output of gas in 1885 was 3,150,000 cubic feet, and in 1900 that output had risen to 5,579,000 cubic feet. The interesting fact disclosed by these figures is that, while the output of gas increased by seventy per cent., the expenditure on capital account had practically remained stationary. This state of affairs is accounted for by the conservative management which marked the conduct of the enterprise during the earlier years of its possession by the city. When there was any addition to plant or mains required, which was calculated to increase the profit earning powers of the undertaking, the cost of the additions were charged up against capital account, but if any plant or mains were required, to replace

existing plant or mains, the cost was taken out of revenue. In addition, almost every year capital account was credited with the amounts received for the sale of distributing mains to outside municipalities, so that in many instances there was an actual diminution of capital. The depreciation fund was also well provided for out of revenue, so much so in fact that frequently the corporation found itself with money in hand for extension to works, without being obliged to make new loans. This safe policy was criticized a good deal on the ground that the city was by it providing cheap gas for posterity at the expense of the then consumers. For example, in 1896, when the policy of the gas committee in this regard was challenged in council, it was admitted that the contribution made in the previous year to the sinking fund had been \$114,325, though the instalment called for by the statute was only \$21,085, and that the fund at that time stood at \$2,420,000, or more than four times as much as the Act required.

The capital expenditure of the undertaking at the end of the fiscal year 1902-03 was \$12,794,845, for the redemption of which there is a combined sinking fund and reserve fund of \$3,919,115. The output of the plant has increased to 6,132,338,500 cubic feet of gas, but despite all this the rates have gone up to the consumer from about fifty-two cents per thousand cubic feet, in the years 1884, 1885 and 1886, to fifty-six cents per thousand cubic feet in 1903. Nor has the amount contributed in relief of the general rates of the city correspondingly increased, for in 1885 the amount contributed was \$125,000, while last year it was only \$175,935. The reserve fund stands where it stood in 1890, and only \$455,679 has been added to the sinking fund.

There can be no doubt that in the earlier years of its operation by the corporation, the gas undertaking more than justified its acquirement as a municipal enterprise, but for the past twenty years its management has left much to be desired.⁽¹⁾ At the present moment the enterprise is by all means the largest in the area of its distribution, and its possibilities of being run as a money-making institution are the greatest of any gas plant in Great Britain. It is true that the undertaking has been carried on at a profit to the corporation, as is evidenced by the fact that it has contributed in relief of the general rates the princely sum of \$3,832,405 since it was taken over, but the singular fact remains, that this contribution was \$150,000 in 1876, while in 1903 it was only \$175,935, and in the intervening years often fell below the amount contributed in the first year of its operation by the city. Although this fact may in some measure be accounted for by the increasing cost of manufacture and the smaller price obtained for residential products, the fact is that the consumers of gas in Birmingham are paying more by four cents per thousand cubic feet for their gas, than they were in the years 1884, 1885 and 1886. This condition of affairs has given rise to a pretty general opinion in the city that the management of the gas enterprise has not for many years been anything like what it ought to have been. The fact is often quoted that although Glasgow has not one-half as large a market for its gas, and is much further removed from the coal areas, it is able to sell gas to its consumers for a less price.

There is also a general impression that the enormous plant of the corporation gas enterprise is not

(1) *History of the Corporation of Birmingham*, C. A. Vince, M.A., Vol. III, p. 264.

being kept up so far as renewals are concerned, and that the city will wake up some day to find that a large capital expenditure will have to be made on that account. No confirmation of this impression can be found in the accounts or reports of the gas committee, but it is significant that there does not seem, from the yearly statements of accounts, to have been any considerable amount of money expended for many years past in renewals to plant and works.

Some years ago, on the plea that good and well inspected fittings, stoves, and all other appliances for the use of gas supplied to poorer customers should be given at as small cost as possible, and that good fittings would save an enormous loss of gas, the corporation assumed the monopoly of supplying all such fittings, stoves, etc., used by consumers of gas within the area of supply. This department of the gas undertaking, while it at once destroyed the business of the private trader in these articles, has been able to supply good articles for little money to consumers, in addition to becoming one of the most extensive and best paying subsidiary departments of any of the municipal enterprises.

There is one very peculiar feature in connection with the gas undertaking, and that is, that the large body of gas workers in the employ of the corporation control the election of some of the members to the city council. Shortly after the enterprise was assumed by the city, the thousands of workers employed in the works began to realize that they could very much better their own condition if they formed communities in various parts of the city, where their combined votes would have an effect upon the election of representatives to council, in wards where they

massed their numbers. The scheme was cleverly managed by the "Gas Workers' Union," and it is well known and admitted in Birmingham, that the gas workers in the employ of the corporation have at the council board a number of representatives, elected from wards in which the gas workers have a controlling vote. These representatives, while they ostensibly represent the ratepayers in the wards which send them to council, are really elected by the splendid organization of the "Gas Workers' Union," which takes an active part in all municipal elections. One result of this condition of affairs is that gas workers in Birmingham receive wages which are higher than in other parts of the United Kingdom for similar work, and more than a private company would think of paying. (1)

(1) History of the Corporation of Birmingham. C. A. Vince, M.A., Vol. III, pp. 274 and 275.

CHAPTER XIII.

THE CITY OF BIRMINGHAM'S MUNICIPAL TRAMWAY UNDERTAKING.

OF all the municipal undertakings of the city of Birmingham its tramway enterprise is the least creditable from the standpoint of the municipal trader. As the natural centre of a population inside, and immediately adjacent to a city of nearly two million people, all within easy radius for a tramway service, the franchise might have been made one of the most successful enterprises in the United Kingdom. So far from these possibilities being realized, the present tramway system of the city would be a standing disgrace to any Canadian town of ten thousand people.

It is true that there are difficulties in the way of the creation and operation of a successful system of tramways in Birmingham. In the first place, the city is one of steep gradients, owing to the fact that it is built upon the southern slope of one and upon both the northern and southern slopes of another of two valleys running east and west. There is also a considerable difference in elevation between the eastern and western districts of the city. Added to these difficulties, nearly all the main roads leading into the city from the suburbs seem to have missed their proper direction and stop short at the outskirts, or approach the centre of the city through narrow and

tortuous thoroughfares. A display of ingenuity could doubtless have solved this difficulty by the creation of a central radiating point for the cars of the tramway system, but absolutely no attempt of this kind has ever been made, and as a result the tramway lines which have been constructed wander into the city by the most convenient routes and make their termini just where it was most convenient, utterly regardless of any attempt at system or any effort to cheaply or conveniently handle the traffic. The result is that a citizen living in the very heart of the city has often to walk from a quarter to half a mile in order to reach a car line.

This condition of affairs has been largely due to the dog-in-the-manger policy pursued by the city council with reference to its tramway franchise. In the early days of street railway traction, when other cities were accepting the over-head trolley system as the best that was offered, the Birmingham city council refused utterly to adopt it on the ground that the trolley wires and poles would disfigure the city, although Birmingham is certainly one of the most unpicturesque cities in the whole world. Experiments were made with every other system of traction, with the result that there is a little of everything in the shape of street railway traction to be found in the alleged system of which Birmingham boasts. On one line the cars are hauled by horses, on another by unsightly steam locomotives which pour out smoke and cinders into the face of the unfortunate passengers upon the open tops of the cars behind, on a third there are grip cars with an underground cable motive power, on a fourth the cars are run by an electric contact system, and upon some of the most important

lines there are no cars at all, but an attempt is made to handle the traffic by means of horse-drawn "busses" of the type used in London.

As can easily be imagined, with the excellent investment which the earning power of an adequate system of tramways within the city offered, to say nothing of the suburban and inter-urban franchises which, in the earlier days could have been easily secured by an enterprising company controlling the city system, the Birmingham city council was not without tempting offers to take advantage of the valuable tramway franchise which it possessed. The franchise for constructing and operating a tramway service in a city like Birmingham, with all the possibilities which the possession of such a privilege offered in the way of securing a similar franchise from outlying municipalities the combined population of which was over a million and a half people, was a tempting proposition for any aggregation of private capital. It is safe to say that if the corporation of Birmingham had been able to appreciate the value of the franchise which it had in its gift at that time, the city might today be receiving an enormous return from any company which might have undertaken to handle its tramway service instead of having, as it has, an alleged system which is a disgrace, and which yields no revenue to the city at all. For this culpable neglect of a magnificent opportunity the unreasoning objection of the council and citizens generally to the overhead system of tramway traction is mainly responsible.

The first successful attempt made to construct tramway lines in Birmingham was in 1872, when the city obtained legislation empowering it to borrow \$525,000 for the construction of nine different lines.

Out of these nine proposed lines only one was built at the time, at a cost of \$75,000. In the following year this line was leased to the Birmingham and Districts Tramway Company for seven years at a rental of \$4,550 a year, the corporation to keep the line in repair. In 1878, the city expended \$225,000 in extending this line. The company to which it was leased, however, went into liquidation, and a new lease was made with the Birmingham Tramway and Omnibus Company for seven years at a yearly rental of \$8,400. This bargain proved a bad one financially for the city. Between 1873 and 1884 a number of other lines were constructed by the corporation, nearly all with different gauges and different systems of traction and leased to various companies.

The capital expended in laying tramways by the city at the end of 1884 was \$633,240, of which \$327,250 was borrowed by the city, the remainder being provided from money deposited by the respective companies which leased the lines, as guarantees for the fulfilment of the leases. Of the \$327,250 borrowed by the corporation, \$219,805 remained owing at the end of 1884. At the end of 1886 there were thirty-three miles of tramways owned by the corporation in and about Birmingham. All were operated by private companies under lease. The cost of these lines to the corporation was \$848,280, or about \$25,170 for each mile of single track. The deposits made with the corporation for fulfilment of leases amounted to \$408,900. The companies were paying in rent \$34,640 a year for the first fourteen years, and \$43,815 for the last seven years of their leases, in addition to the whole or some part of the certified cost of repairs.

With the exception of minor extensions and alterations, no additions whatever have been made from 1886 to 1903 to the tramway system of the city.

During the two years following 1886, the council had many propositions made to it for the improvement of the tramway system, but it pursued a policy of steady opposition to the schemes submitted. The reason alleged for this obstructive policy was that the corporation was already committed to a large expenditure under the terms of the leases held by the different companies operating the tramway lines already constructed. At the end of 1884, the city was under bonds to construct, at the bidding of the companies, something like \$325,000 worth of lines. The principal reason for its refusal to entertain schemes for the improvement of the system was, however, the opposition of the members of the council to any one of the then known system of traction, including the overhead trolley system. The result was that all the projects submitted were either rejected or indefinitely postponed. That they have never been renewed is probably due to the disappointing results which have attended the operation of the completed tramways in the city.

The terms to which the corporation steadfastly adhered in granting concessions to companies to operate its tramways were calculated to protect the ratepayers from loss, without yielding any profit. The council constructed all lines, and refused to grant the right of construction or extension to the leasing companies. These complained that the cost of construction was excessive and that, inasmuch as the city charged rentals sufficient to pay all capital charges upon the money invested in the lines, the financial terms im-

posed upon them were too drastic to enable them to make money unless they were given the privilege of extending the lines in order to increase the scope of their earning powers. Another cause of complaint on the part of the companies was that the city compelled them to deposit with the city treasurer one-half of the capital cost of the lines leased, as a guarantee for the fulfilment of their leases. Upon this locked-up capital the city paid interest at the rate of three and a half per cent., and the companies were compelled to pay the corporation its yearly outlay in keeping the lines in repair. The rentals charged were intended to cover the interest charges on the borrowed capital and all contributions to a sinking fund for the redemption of the capital outlay in twenty-one years. For the first fourteen years of the currency of the leases the interest charged by the corporation and paid by the companies was at the rate of four per cent. per annum, and for the remaining seven years of the currency of the leases, five per cent. per annum. The rentals charged were about \$2,000 per mile of single track per year.

The council, in 1896, accepted an offer made by a syndicate, composed of Mr. James Ross, President of the Montreal Street Railway Company, and Mr. William Mackenzie, President of the Toronto Railway Company, to take over the whole tramway system of the city and construct an entirely new and adequate system, with a uniform gauge and system of traction. This syndicate also offered to reduce the fares and make halfpenny stages, as was afterwards done in Glasgow. For the use of the franchise the Canadian syndicate agreed to pay a track allowance, or way leave, of \$925 per mile of single track; all lines, poles,

wires, etc., erected at the company's expense, to revert to the corporation at the termination of a twenty-one years' lease. Before their offer was accepted, the new syndicate secured by purchase the unexpired leases held by existing companies for tramway lines in the city, and, after they understood that their offer had been expended, a considerable amount of money was spent upon the partial erection of a new electrical power station. At the last moment, the corporation refused to permit the use of the overhead trolley system, and there was a disagreement over an amended offer in which the Canadian syndicate consented to instal an underground conduit system of traction. The city finally withdrew from its bargain, and the syndicate charged bad faith. The Canadian syndicate, in 1902, sold its leases purchased in 1896 to the British Electric Traction Company.

This company had during the previous eight years improved and consolidated, under leases from the various local municipalities, the tramway systems in the districts around Birmingham. Inasmuch as Birmingham is the natural centre of radiation for all these systems, the object of the British Electric Traction Company in purchasing the unexpired leases for the Birmingham tramways from Messrs. Mackenzie and Ross, was to create one great uniform system, with a uniform gauge and traction power, covering Birmingham and the surrounding cities and towns. In January of 1903, the British Electric Traction Company managed to re-open the negotiations which had been closed in 1898 with the Messrs. Mackenzie and Ross syndicate. An interim agreement was entered into between the city and the company under which an entirely new and adequate system of tramways was

to be provided, the city building the lines and the company supplying the equipment and power. For the franchise, the company was to pay, for the first three years of the lease, \$60,000 a year, and afterwards, until 1911, seven and a half per cent. of the gross receipts, with a minimum of \$105,000 a year; from 1911 until the end of the lease, fifteen per cent. of the gross receipts with a minimum of \$165,000 a year. At the end of the lease the corporation was to take over the stations, depots and power houses within the city and the rolling stock used on the city lines at a valuation defined in terms in the agreement. Before this agreement was ratified by council, another company submitted a better financial offer. The British Electric Traction Company intimated that, although they believed that this new offer was made for obvious purposes, they were prepared to better the offer they had already made, rather than not secure the franchise. The amended offer was duly made, but the corporation rescinded its decision to enter into any agreement with the company and decided to operate the tramway system itself, as soon as the existing leases ran out.

The first act of the corporation, after coming to this decision, was to appoint a tramways manager at a salary of \$7,500 a year. This appointment will carry with it, after the first of January, 1904, the work of superintending about three-quarters of a mile of line. The corporation will have no other tramway lines to work until the end of 1906, and has no statutory powers to build any additional lines in the meantime.

The amount of capital expended upon the Birmingham tramways up to the end of 1903 has been \$1,144,435, for the redemption of which a sinking fund of \$727,580 has been accumulated.

CHAPTER XIV.

THE MUNICIPALLY CONDUCTED ELECTRIC LIGHT UNDERTAKING OF THE CITY OF BIRMINGHAM.

WHEN electric lighting was first introduced into England, the city of Birmingham, in common with many other cities and towns in England, was canvassed by enterprising speculators who desired to confer the boon of this new light upon its citizens. This was in the year 1881, and a large number of bills were promoted before Parliament in that, and the following year, by companies seeking powers to instal electric lighting plants in various cities and towns in the United Kingdom. This avalanche of applications for legislation resulted in the passing by Parliament of a general enactment in the session of 1882, governing the terms under which private companies might establish electric lighting plants in the towns and cities of the United Kingdom. This Act is still known as Mr. Chamberlain's Electric Lighting Act, 1882. Among other provisions, it gave the local municipal authorities power to purchase any electric light undertaking established within their bounds at the end of twenty-one years, on terms to be fixed by the bare valuation of the plant and material, without any addition in respect of goodwill, or profits, or compulsory sale.

This drastic general enactment retarded the introduction of electric light as a popularly used illuminant

in England. Municipal corporations were very chary about taking it up, in the first place because they knew very little about it, and in the second place because all were interested in, and many were conducting as municipal undertakings, extensive gas light enterprises.

It was not about the time of the passing of this general enactment that the first private company was incorporated with powers to supply electric energy, within a limited area, in the city of Birmingham. Before powers were given to this company by Parliament, the municipal gas committee reported to council that it did not think the time had come when it would be wise for the city to undertake the introduction of the new light as a municipal enterprise. It was on this report that council decided not to oppose the application of the private company for Parliamentary powers to supply electric energy within the city. After spending a good deal of money the company, however, came to grief, along with many others organized about the same time. It was alleged by these companies that the drastic terms of Mr. Chamberlain's Act made it impossible to secure capital for an enterprise with so short a lease of life and such unsatisfactory terms of purchase at the termination of that short lease. A long fight took place in Parliament to make less drastic the terms of the general law on this subject, which resulted in the passing of the Electric Lighting Act, 1888, under which the consent of the municipal authority was required before private companies could receive Parliamentary powers within the municipal area concerned. Power was given the Local Government Board, however, to dispense with such consent if it was refused upon

what it considered unreasonable grounds. This Act settled the period which must elapse, before a municipal corporation can compel purchase of such undertakings, at forty-two years, unless a shorter term is specified in the Act of Parliament granting the power to establish such enterprise. The conditions of purchase, however, were left the same as in the previous Act of 1882.

Within a few days after the passing of this general enactment, Mr. Arthur Hookham and Mr. Arthur Chamberlain, both citizens of Birmingham, gave notice of their intention of applying for legislation to supply electric energy within the city. The city council decided not to oppose the application to Parliament, but insisted that the area granted should be a limited one and that the capital of the company should be at least \$250,000. Parliamentary permission was obtained, but almost immediately the franchise was disposed of to a Liverpool firm, who in 1890 successfully promoted a company under the name of the Birmingham Electric Supply Company, which at once began to instal a plant to supply the demand within the area granted under the Act. The corporation immediately became the customer of the new company by adopting electric light in the Victoria Law Courts. The area of supply of the company was enlarged in 1891, but it was still confined to the business streets in the centre of the city.

The council had its third opportunity to revise its electric light franchise in 1893, when the company sought its consent to an application to Parliament for legislation to enlarge its area within the city. The council again decided not to go into the supplying of

electric light as a municipal undertaking, and contented itself with the demand that the company should reduce its charges. Up to this time, the maximum price allowed by Parliament of ten shillings and eight pence per Board of Trade unit, had been charged. The financial success of the company was assured in 1895. It had four hundred and eighty customers, who used the equivalent of 35,262 eight candle power lamps, from which there was a revenue of \$60,000 per annum, and a net profit of \$29,345. Two years later the number of customers had risen to nine hundred and sixteen, using the equivalent of 78,464 eight candle power lamps, which brought in a revenue of \$126,440, and a net profit of \$64,810.

This evidence of financial success evidently removed one of the chief reasons against municipalization, for in 1897 the council unanimously adopted a resolution instructing one of its committees to report upon the desirability of purchasing the plant and works of the company. The immediate result of the passing of this resolution was to increase the price of the \$25 shares of the company, already quoted at a premium, to \$60 on the market. The capital was \$1,000,000 in \$25 shares, the price of which, however, rose to \$52.50, and that price was made the basis of purchase, the city paying \$2,100,000 for the enterprise. The purchase money was to be paid at the option of the company either in cash or corporation two and one-half per cent stock at par. The currency of the civic loan for the money required to complete the purchase was forty-two years, so that the annual payment for interest and sinking fund was, on a two and three-quarter per cent. basis, \$85,000, or \$20,000 more than the net profits earned by the company in

1897. It was admitted that the price paid by the city for the undertaking was not justified by its actual value. The price of the shares had been determined by the expectation of purchase, rather than by earnings. It was contended, however, that sooner or later the city would have had to acquire the enterprise in any event, and that it could not expect by waiting to obtain a more favorable opportunity or a more satisfactory bargain.

The earnings of the company during the year prior to the taking over of the works, 1899, showed a gross profit of \$117,445. If the enterprise had been in the hands of the corporation during that year, and had been handled with equal economy and skill, the profits would have been sufficient to have paid interest and sinking fund contributions on the loan of \$2,500,000 required to pay the purchase price, and have left a net profit besides of \$15,000. At the time of the transfer the company had a reserve fund built up out of revenue amounting to \$129,280, and this fund the city decided to continue.

The corporation assumed control of the undertaking on the 1st of January, 1900, and inasmuch as the civic year ends on the 31st of March, the accounts were made up from the 31st of December, the end of the company's financial year, to the 31st of March, the end of the civic fiscal year. The gross profit on the operation of the plant for these three months was \$13,535, all of which was absorbed in the payment of capital charges. The net loss on the operation of the enterprise during the following year, 1901, was \$15,020, and in the year 1902 the net loss was again \$24,060, both of which amounts were charged up against the reserve fund. The total capital expenditure at the end

of 1902 stood at \$2,842,570, largely incurred in extending the plant to meet demands consequent upon the extension of the area of supply, for the city assumed a much larger area of supply than the company had been expected to have, as soon as it took over the undertaking.

During the fiscal year of 1903, the total amount of capital expenditure rose to \$2,941,615. The revenue account showed a gross profit of \$152,965, and a net profit after the payment of capital charges of \$33,935, which was placed to the credit of reserve fund. The combined deficits of the two previous years amounted to \$39,080, so that the net deficit since the city took over the enterprise has been \$15,145.

The annual profits made by the company just prior to the city's taking over the works were about \$60,000 a year, clear of all capital charges and payments on the reserve fund. During the years when these profits were being made the company began the work of converting the system over from 110 to 220 volts, permitting the use of sixteen instead of eight candle power lamps. Of course, the city had been compelled to meet a much larger expenditure for capital charges than the company had to but, on the basis of the earnings of the company during the last year of its operation of the plant, the gross profit was sufficient to meet all the capital account charges which the corporation has since had to pay and leave a profit besides. Yet, during the three years the enterprise has been under the control of the council, there has been a net deficit of \$15,145. The claim is made that this deficit has been the result of the expenditure made in changing over the voltage of the system, but that claim is scarcely fair, as the company had more than half

completed the work and had met all charges for it out of revenue.

The fact of the matter is, that the city took over a successful commercial venture at its highest market value, rather than allow the private company to increase its area of supply and earning power, and converted a handsome yearly profit into a deficit, in spite of the fact that it at once assumed the larger area of supply in which there were great possibilities of an immediate increase in revenue. It is a well-known fact in Birmingham that the management of the undertaking by the corporation has not been what it ought to have been, and that there are miles of conduits and mains installed by the company which will have to be abandoned in a few years, because they are altogether too small to accommodate the demands which are being made upon the enterprise. This will mean a large capital expenditure within a very few years. During the time the voltage of the system was being changed over by the corporation, customers had for months to put up with varying currents, and at times were left in absolute darkness, and during the process tens of thousands of lamps were destroyed.

The net result has been, so far, that the city has lost money upon an undertaking which should have been a great financial success, simply through mismanagement. The supplying of Birmingham and the districts round about with electrical energy is a very valuable franchise, because of the enormous population and the multiplicity of small manufacturing plants which could be easily induced to use electric energy. In spite of all these possibilities, the city of Birmingham is one of the worst electrically lighted cities of its size and importance in the three Kingdoms.

CHAPTER XV.

THE BUSINESS RESULTS FROM MUNICIPALLY CONDUCTED ENTERPRISES IN THE CITIES OF GLASGOW AND BIRMINGHAM.

IN endeavoring to arrive at some definite idea of the business results which have accrued to the ratepayers of the cities of Glasgow and Birmingham from the establishment of municipally-conducted enterprises, we are face to face with a difficult problem. If it were possible to compare the results of the management of public services by private companies with the management of identical services by municipal councils under similar conditions with equal revenue-producing possibilities, the element of comparison could be introduced to solve the question. In neither of these cities, however, is that possible, nor is any effective result obtained by making a comparison between the municipal ventures of the two, or either of them, with those of other cities where private companies conduct similar services.

The following tables taken from the official statistics of the two cities above referred to are designed to give a general idea of the gross earning power, on the money invested, of the principal municipal undertakings of the two cities of Glasgow and Birmingham, together with as close a comparison as is possible between the rates charged for the services mentioned in these cities and in the city of Toronto, Canada.

Expenditure upon the four principal Municipal Undertakings of the City of Glasgow, with the total amounts set aside out of revenue for redemption of borrowed capital, and the net profit and loss upon the undertakings, since they were established until the 31st of May, 1903.

NATURE OF THE ENTERPRISE	AMOUNT OF CAPITAL EXPENDED	AMOUNT TAKEN FROM REVENUE FOR REDEMPTION	NET PROFIT	NET LOSS
Waterworks...	\$19,884,850*	\$5,982,850*	.....	.....
Gasworks	10,340,545†	2,319,475†	\$214,120†	.....
Tramways	13,774,275‡	776,660‡	533,800‡	.....
Electric Light.	5,208,725§	180,765§	.....	\$69,475§
Telephones ...	1,354,690	38,830	.....	.....
Totals..	\$50,563,085	\$9,298,580	\$747,920	\$69,475
Net Profit....	\$747,920			
Net Loss.....	69,475			

Profit, \$678,445 upon an investment of \$50,563,085.

Leaving waterworks out of the question, as that class of enterprise is regarded as essential to public health, and is consequently not conducted as a com-

* Glasgow Corporation Waterworks, Statement of Accounts, 1903, p. 34.

† Glasgow Corporation Gas Committee, Statement of Accounts, 1903, pp. 30, 31, 32. (The sum of \$6,548,760 has been written off out of revenue for a depreciation fund on plant and works.)

‡ Glasgow Corporation Tramways, Statement of Accounts, 1903, p. 22. (The sum of \$3,126,715 has been written off out of revenue for a depreciation fund on plant and works.)

§ Glasgow Corporation Electricity Supply, Statement of Accounts, p. 37. (The sum of \$480,835 has been written off out of revenue for depreciation.)

|| Glasgow Corporation Telephone Accounts, p. 3. (The sum of \$10,400 has been applied as basis of Reserve Fund.)

mercial enterprise, we have the following results in the city of Glasgow :

NATURE OF THE ENTERPRISE	AMOUNT OF CAPITAL EXPENDED	AMOUNT TAKEN FROM REVENUE FOR REDEMPTION	NET PROFIT	NET LOSS
Gasworks	\$10,340,545	\$2,319,475	\$214,120	.....
Tramways	13,774,275	776,660	533,800	.....
Electric Light . .	5,208,725	180,765	.....	\$69,475
Telephones	1,354,690	38,830	.....	.....
Totals . .	\$30,678,235	\$3,315,730	\$747,920	\$69,475
Net Profit	\$747,920			
Net Loss	69,475			

Profit, \$678,445 upon an investment of \$30,678,235.

Expenditure upon the four principal Municipal Undertakings of the City of Birmingham, with the total amounts set aside out of revenue for the redemption of borrowed capital, and the net profit and loss upon the undertakings, since they were established, until the 31st of March, 1903.

NATURE OF THE ENTERPRISE	AMOUNT OF CAPITAL EXPENDED	AMOUNT TAKEN FROM REVENUE FOR REDEMPTION	NET PROFIT	NET LOSS
Waterworks . . .	\$35,497,480*	\$ 798,275*	.....	\$76,540*
Gasworks	12,794,845†	3,399,640†	\$3,832,405†	.....
Tramways	1,144,435‡	727,580‡	.....	.....
Electric Light . .	2,941,615§	101,980§	.....	15,145§
Totals . .	\$52,378,375	\$5,027,475	\$3,832,405	\$91,685
Net Profit	\$3,832,405			
Net Loss	91,685			

Profit, \$3,740,720 upon an investment of \$52,378,365.

* Birmingham Waterworks Committee Report, 1903, Appendix P. (There is a balance to credit of Reserve Fund of \$31,190.)

† Birmingham Blue Book, 1903, p. 242; Gas Committee Report, 1903, p. 28. (The sum of \$500,000 has been provided out of revenue for Reserve Fund.)

‡ Birmingham Corporation Blue Book, 1903, p. 242.

§ Birmingham Corporation Blue Book, 1903, p. 152; net loss, p. 215. (The sum of \$131,970 is balance of Reserve Fund handed over by the Company when the plant and works were taken over.)

Leaving waterworks out of the question, on the ground that they are services essential to public health and are consequently not supposed to be conducted as purely business enterprises, the three principal undertakings conducted by the city of Birmingham show the following results:

NATURE OF THE ENTERPRISE	AMOUNT OF CAPITAL EXPENDED	AMOUNT TAKEN FROM REVENUE FOR REDEMPTION	NET PROFIT	NET LOSS
Gasworks	\$12,794,485	\$3,399,640	\$3,832,405	.....
Tramways....	1,144,435	727,580	.....	.....
Electric Light.	2,941,615	101,980	.....	\$15,145
Totals..	\$16,880,895	\$4,229,200	\$3,832,405	\$15,145
Net Profits....	\$3,832,405			
Net Losses....	15,145			

Profit, \$3,740,720 upon an investment of \$16,880,895.

From the foregoing tables it will be noticed that some \$8,868,235 of gross profits upon the Glasgow gas enterprise have been invested in sinking fund and in a depreciation of plant funds, and that the net profits are given at only \$214,120, most of which represents money advanced to the municipal electric light undertaking when it was first established; while the Birmingham gas undertaking shows a net profit of \$3,832,405, paid in relief of the general rates of the city, with a combined sinking and reserve fund amounting to \$3,899,640, with nothing whatever set aside for depreciation of plant and works. Thus, while the Glasgow undertaking earned a gross profit of \$9,082,355 in the thirty-four years of its existence, or an average of about \$267.128 a year on a capital investment of \$10,340,545, the Birmingham enterprise earned a gross profit of \$7,732,045 in the twenty-eight years of its existence, or an average of about

\$276,144 a year on a capital investment of \$12,794,845. In Glasgow it was found necessary, or deemed prudent, to set aside out of gross profits the sum of \$8,868,235 for depreciation and sinking funds, while in Birmingham only \$3,899,640 was set aside for these combined purposes, though the plant and works are of even greater age than those of Glasgow and were only acquired by the city six years later. Outside of sinking fund, Glasgow has a depreciation fund on plant and works of \$6,548,760, while Birmingham has no depreciation fund on plant and works at all, but a reserve fund of \$500,000. It is evident, therefore, that either the Glasgow corporation has created a depreciation fund on its gas plant far in excess of its needs, or the Birmingham corporation has paid in net profits for the relief of the general rates of the city an amount of money which should have been set aside for depreciation. It would seem fairly evident that the Glasgow corporation has erred on the side of excessive caution, while the Birmingham corporation has erred in the other direction. In both cities the price of gas is almost the same, the average price in Glasgow being fifty-eight cents for domestic and fifty cents for motive power purposes per thousand cubic feet, while the average price in Birmingham is fifty-seven cents per thousand cubic feet for all purposes. It is interesting to notice, also, the exceptional nature of the revenue-producing constituency in both cities so far as gas is concerned. Glasgow has the larger population within a very much more restricted area, and the great bulk of its revenue is obtained from the sale of gas for domestic purposes because of that congestion and the predilection of the people for flat and apartment houses, where gas for fuel, heat and light

is a great convenience. The population of Birmingham is smaller and more diffused, but in and about the city there are thousands of small factories and workshops in which large quantities of gas are used for motive power purposes, so that a large proportion of its revenue is obtained from the sale of gas for motive power. Then, of course, the price of coal in both cities, and especially Birmingham, is much lower than coal can be obtained for in any of our Canadian cities, and the cost of labor is very much less. The total output of gas in Glasgow last year was 5,703,143,225 cubic feet, and the total output in Birmingham, 6,132,338,500 cubic feet.

The amount of gas sold in the city of Toronto last year was 1,032,515,000 cubic feet, at a net price of eighty cents per thousand cubic feet. The capital outlay in Toronto, considering the amount of gas sold, is very much larger than in either Glasgow or Birmingham, because of the more generous manner in which the city is built. Owing to the enormous difference in conditions, it is quite impossible to even attempt to successfully estimate the price at which gas could be sold in Toronto, had it the population and revenue-producing possibilities of either Glasgow or Birmingham, but it is safe to assume that the selling price would be very much less than eighty cents per thousand cubic feet.

The total gross profits of the Glasgow tramways since they were taken over by the city in 1894 have been \$3,903,375 on a capital investment of \$13,774,275, or about \$433,708 a year. Of this amount of gross profits, \$902,980 has been set aside to wipe out the cost of the old horse car system and \$2,223,735 as depreciation fund on the present electric system.

making in all \$3,126,715 taken out of revenue for depreciation. The sinking fund for the redemption of borrowed capital amounts to \$776,660, and the net profits paid over to the Common Good Fund amount to \$533,800. The Birmingham tramways have cost the city \$1,144,435, for the redemption of which debt there is a sinking fund of \$727,580. They have paid no profit of any kind, and the service is so utterly wretched that they can scarcely be dignified by the name of a tramway system at all.

The street railway system of the city of Toronto is owned by the city and leased to a private company, which has paid into the city treasury for the use of the franchise for a period of nine years, the sum of \$1,833,826 out of net profits, or \$1,300,026 more than the entire net profits of the Glasgow undertaking, paid into the credit of the Common Good Fund, during the same period. The street railway system of Toronto serves a population of about 250,000 within an area of 10,800 acres; the Glasgow tramways serve a population of 780,000 within an area of 12,700 acres, and a suburban population of 292,000 round about the city. Thus, the urban population served by the Glasgow tramways within almost the same superficial area is more than three times as large as the total population of Toronto. If Toronto had had the population of Glasgow within the same area during the past nine years, the profit the corporation would have made out of its street railway franchise would have been more than three times as great as it was on the same basis, or more than \$5,501,478, without considering the suburban population served by the Glasgow tramways at all. Taking that suburban population of 292,000, which in itself is 42,000 larger than

the total population of Toronto, and calculating the earnings which would have accrued, had the Toronto street railway system been serving a similar suburban population, at one-half the amount of the sum paid to the city during the past nine years, and we have \$916,913 which, it is safe to say, would be a low estimate of the revenue-earning possibilities from a similar suburban population about the city of Toronto during that period. Thus, on the basis of its payments to the city during the past nine years, the Toronto street railway system would have paid out of net profits to the city during that period the sum of \$6,418,391, had the city had, during that time, the population served, and the same revenue-producing possibilities, as the city of Glasgow had, or \$2,757,876 more than the total gross earnings of the Glasgow tramways, exclusive of sinking fund and interest on borrowed capital during that period. The alleged tramway system of Birmingham cannot for a minute be compared with the street railway system of Toronto, either as regards efficiency of service or the fares charged.

It is difficult to estimate the difference in the fares charged in Glasgow and those charged in Toronto, because of the different system, rendered necessary by totally different conditions. The only safe comparison is that obtained by comparing the number of passengers carried per car mile, the average ride on the cars, and the average fare paid per mile in the two cities. On the Glasgow tramways the number of passengers carried per car mile on the entire system, urban, suburban, and inter-urban, is 12.64, the average ride on the cars on the whole system is a little

less than a mile, and the average fare paid per passenger is a fraction less than a cent. On the Toronto street railway system the number of passengers carried per car mile is 4.56, and the average fare paid per passenger is 4.09 cents.

The total gross profits of the Glasgow electric light undertaking, since it was taken over by the city in 1892, has been \$592,125, out of which a sinking fund of \$180,765 has been created, and a depreciation fund on plant and works of \$480,835, which left a net deficit at the end of the year 1903 of \$69,475. The total gross profits of the Birmingham electric light enterprise, since it was taken over by the city in 1900, have been \$86,835, all of which has been absorbed in the creation of a sinking fund for the redemption of borrowed capital, together with the sum of \$15,145 taken from a reserve fund created by a private company, which owned the undertaking before the city assumed it, so that the net loss of the enterprise since the city took it over has been \$15,145. The amount of the reserve fund which the city took over from the company with the other assets of the enterprise is \$131,970.

The amount of electricity sold in the year 1903 by the Glasgow enterprise was 11,501,324 units, at an average price of five cents a unit for lighting, including the city itself as a customer, and three cents a unit for power. The amount of electricity sold by the Birmingham undertaking during the year 1903 was 3,391,099 units, sold at an average price of ten cents per unit for lighting and four and one-third cents per unit for power, with an average meter charge in addition of fifty-four cents per quarter.

The charges for electric lighting in Toronto have been set forth in the chapter dealing with the Glasgow enterprise.

The total gross earnings of the Glasgow telephone undertaking since it was established in 1900, have been \$49,290, of which \$38,830 has been absorbed in the creation of a sinking fund for the redemption of borrowed capital, and \$10,460 has been applied as the basis of a reserve fund. The rates charged for corporation telephones in Glasgow are \$26.25 a year for an unlimited service, and \$17.50 for a limited service, when two cents a call is made on the caller only using such instrument. The rates charged by the Bell Telephone Company for telephones in Toronto are, generally speaking, \$45 for a business service and \$25 for a household service, both unlimited.

CHAPTER XVI.

WHAT MAY BE LEARNED FROM THE EXPERIENCES OF GLASGOW AND BIRMINGHAM.

THE experiences of the cities of Glasgow and Birmingham in the management of public franchises cannot fail to be of both interest and value to students of municipal economy. From them many important lessons may be learned, not the least of which is that the potential value of an abstract theory rests chiefly in its application. It is not the principle of municipal trading that is on trial in these cities; such a controversy may well be left to the ingenious rhetoric of debating societies. The practical question which presses for solution is whether that principle can or cannot be successfully maintained in the actual operation of speculative franchises.

Taking either Glasgow or Birmingham as a model, one is confronted by several conclusions. It is evident that even in these cities the financial results of such enterprises cannot with certainty be foretold. Success and failure in varying degrees have attended the efforts of the municipalities to render efficient and economical service in the different spheres of industrial activity which have been operated under civic control. In some instances the specific cost of such services has been reduced; in others, even this much desired object has not been attained, or has been attained only at the cost of increase in the general

rates. Taken as a whole, however, it cannot be denied that the extension of municipal trading to the speculative field in Glasgow and Birmingham has resulted in such large accessions to the civic debts as should be balanced by concrete advantages in other directions in order to warrant the increased obligations thus imposed upon the taxpayers.

It must also be remembered that Glasgow and Birmingham have been admittedly the most conspicuously successful in municipal trading of the cities of Great Britain; and bearing this in mind the statistics relating to that country generally are worthy of careful perusal. A return ordered by the Imperial House of Commons on June 25th, 1902, shows that on March 31st of that year 299 out of 317 municipalities (exclusive of London) were carrying on one or more productive municipal enterprises. The figures given in Chapter IV. of this book show that the outstanding loans contracted by local municipalities in England and Wales in connection with municipal trading undertakings amounted in 1885 to \$406,150,000 and that this amount has by 1901 to \$718,595,000, an increase during 16 of 77 per cent. The same statement shows that in 1885 the municipal obligations of England and Wales in connection with waterworks, gasworks, electric lighting and tramways conducted as municipal undertakings were \$226,305,000, and that by 1901 this had been increased to \$480,965,000, equal to 112½ per cent.

It would be impossible without a most extensive study to pass judgment upon the merits and demerits of the various municipal undertakings whose history is involved in these figures. It is probable that such an examination would show instances of results both

favorable and unfavorable to the cause of municipal ownership. It is generally admitted, however, that the general average of success has not been as high as in the cities of Glasgow and Birmingham, while the proportionate increase in municipal debt due to the tendency of municipalities to indulge in this form of prisa is certainly startling.

Any attempt, other than by way of illustration, to apply the lessons of Great Britain to existing conditions in Canada would involve an excursion into the realm of controversy, and such is not the present design. It may, however, be pointed out that the rapid extension of municipal trading in Great Britain, and the consequences which have ensued therefrom, have come about notwithstanding the existence of a strict central control over municipal finances and municipal audits for which there is no parallel in this country. The experience of Great Britain has shown the absolute necessity for such a close check upon the tendency of municipalities to pursue this policy beyond the bounds of wisdom at the dictation of those who do not distinguish clearly between principles and conditions. Even the complete and powerful organization of the British Parliament has not been able to cope with this problem as adequately as could have been desired.

Two other considerations also must enter into any comparison between Great Britain and Canada in relation to the question of municipal trading. One is concerned with the class of men who go to make up the councils and boards of aldermen of municipal corporations and the other has regard to the continuity of system under which municipal government is conducted. It is well known that in Great Britain the

councillors and boards of aldermen are as a rule composed of men who, while graduates from the business world, are to a greater or less extent members of the leisure class. Municipal honors are more highly prized in Great Britain than they are in Canada by the men whose services are most to be desired in municipal management, and thus it is found in many cases that men whose names are widely known in commerce, in professional circles and in the higher branches of politics, are serving on the aldermanic boards of their home communities. Such a condition of affairs is impossible in a young country where the most able men are usually so fully occupied in business or professional life that they consider themselves unable to spare much time to the service of the civic community in which they live. The result of this condition undoubtedly is that municipal councils in Canada are not as a rule composed of men so well equipped to deal with broad questions of administration and finance as are those of the mother country.

The second consideration is also an important one. Continuity of management is almost absolutely necessary to success in the conduct of large business enterprises. The system so generally adopted in Great Britain, which provides for the retirement of only a minority of municipal councillors at each election, undoubtedly possesses a great advantage in this respect over a system which is liable to result in a complete change in the personnel of a council at the end of any given year. In the management of an industrial undertaking particularly such continuity is necessary, whether the enterprise be that of a municipality or of a private corporation, and in this respect also the pre-

vailing system of municipal elections in Canada must result unfavorably to the conduct of such enterprises.

It is even more important, however, that the consideration of proposals for the conduct of municipal enterprises should include a proper conception of the subject in its relation to municipal credit. It is often urged, for instance, that a municipality can operate its own franchises more cheaply than a private company (and thus afford a cheaper service), owing to its ability to borrow money for the enterprise at lower rates of interest. Granting this to be so, it is apparent that the difference in interest rates must be due to the credit of the municipality through the possession of resources apart from those in which the borrowed money is to be invested, which resources are pledged as security for the loan. If this were not the case the superior borrowing power could not exist. Thus it happens that the general credit of a community must be affected by its entry into the sphere of industrial activity, and to whatever extent that credit is used for the securing of money at low interest for the purpose of undertakings which would of themselves demand a higher interest rate, to just that extent are the bonds of the community for general or other purposes unfavorably influenced. Major Leonard Darwin, in his authoritative work on "Municipal Trade" (John Murray, 1902) makes this point very clear. Using a hypothetical gas-plant as illustration, he says:

"If a town council were to borrow money, and if it were to make the interest solely payable out of the profits made by the gas-works bought with the sum thus raised, then few will doubt that a higher rate of interest would have to be paid than would be necessary in the case of the ordinary municipal

debts, the security for which is limited in no such way. . . . If gas-works were bought with money raised by a loan with the profits on the gas-works as sole security . . . the excess of interest paid on a loan thus raised would best be regarded by the municipality as an insurance against any losses that might be made on this trading enterprise. . . . Thus, when any industry is municipalized, part of the profits which may accrue to the public may be said to be due to the municipality not insuring against a risk against which insurance is made as long as the works remain in private hands."

Again he says: "Any considerable increase in the debt of any municipality will undoubtedly tend to increase the rate of interest payable on new loans. . . . If the policy of municipalization were ever adopted in London, for example, even to the extent advocated by some serious politicians, it would, to quote the words of Lord Avebury, make the rate of interest 'appreciably higher than it is at present.' . . . No doubt, when the rate of interest paid on the loans raised by local authorities for industrial purposes has risen from any cause not affecting private trade, the results will be apparent in the rate of net profits earned by the municipalities in question. But the rate of interest payable on all other municipal loans borrowed at the same time will rise equally; and in this way municipal trade may throw an additional charge on the ordinary civic expenditure which will not show itself in the accounts of the municipal industries to which it is really due. Thus the effect which municipal trade may have in increasing the rate of interest on municipal loans not only makes past results unreliable as guides for the future, but also makes the

recorded net profits an uncertain guide as to what municipalities are actually gaining by their industrial ventures."

In considering the question of municipal trading in its relation to Canada, therefore, it is necessary that a careful judgment should be exercised. It is not sufficient to know that the principle is of itself a sound one. It is not even sufficient to ascertain that in certain other places certain enterprises have met with a certain measure of success, be that success great or small. A public franchise is a public asset, to be administered either directly or indirectly as may be most profitable to its owners. If a greater revenue and lower rates can be secured by leasing it than by working it, common sense dictates that direct benefits should not be disregarded in favor of an economic theory. If, on the other hand, direct operation seems to promise the better results, it is advisable that local conditions should be carefully examined and future local obligations carefully weighed in order that the mistakes and disasters which have sometimes attended similar ventures in other places may be avoided.

This, indeed, is the broadest as it is the most vital aspect of the question of municipal trading and it is this aspect which calls for such treatment as only general legislation can effectually give. The tendency of municipalities to indulge in trading enterprises is a feature of modern municipal growth. The visible attractions of such a policy are many, while the dangers by which it is surrounded are hidden from the casual observer and are in many cases incomprehensible to the unstudious taxpayer. The experience of Great Britain has shown that the average community considers projects of municipal trading without due regard

to their effect upon conditions which seem remotely removed from the immediate subject under discussion. In this respect strong guidance has been found to be necessary and even the strongest guidance so far instituted has not proved completely effective. It is therefore important, if such enterprises are to become to any degree general in Canada, that Federal legislation should be enacted by which a uniform policy should, as far as possible, be applied to the consideration of all undertakings of this nature and by which also the assumption of financial obligations by municipalities in connection with such enterprises could be adequately controlled and wisely directed.

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