

Electrical Department.

MUNICIPAL ELECTRIC LIGHTING.*

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The question of how industries that are to a greater or lesser degree carried on for the accommodation and benefit of the general public, can be conducted to the best advantage, has always been one of national economic import, and the idea that they should be owned and operated by the public body corporate is not altogether a new one.

The principle is enunciated by economists that industries of this nature, such as transportation, the transmission of intelligence, the supply of water, and of artificial light, are monopolies inherently and essentially; they are therefore classed as natural monopolies. All of these industries are primarily under the control of the State, and for this reason, it is claimed, they should be owned and operated by the Government.

The advantages claimed for such ownership are that the work would be more economically performed, the margin of profit which a private company derives from the business being saved to the public treasury, and that the service rendered would be a more efficient one. Moreover, it is held that private ownership of these industries encourages corruption, particularly among legislative bodies, and that under government ownership this would be done away with. To the public mind the word monopoly conveys the idea of an autocratic power which leads to abuse of privileges and advantages enjoyed, and consequent abnormal returns on capital invested. Prof. Richard T. Ely, of the University of Wisconsin, holds that private monopoly is a menace to the public, and that men are not good enough to be entrusted with such a despotism as that which monopoly confers.

It is the purpose of this paper to consider the question of Government ownership of natural monopolies only in so far as it concerns works for the supply of artificial light, and particularly such as is wholly for the public use, viz., the lighting of streets and public buildings.

It is proposed that these works be owned and operated by the municipal corporation, and many cities and towns have been considering the advisability of the plan. The question has been hotly argued on both sides, and it is to be regretted that these discussions are not always conducted in a fair-minded, liberal manner. Arguments advanced by men interested in private lighting companies are denounced by their opponents as prejudiced opinions; the cry of "Monopolist" is raised to enlist public favor on the side of municipal ownership, and the same offence is thus committed as is charged. It is but natural that persons having capital invested in any particular enterprise should strive to protect their investments, especially in a case of so serious a nature where the threatened danger means inevitable destruction. On the other hand, there is much to show that the arguments put forth by the advocates of municipal ownership are not always inspired by pure and unselfish motives. If these discussions are to accomplish any good the opinions advanced by either side must be

honest and unbiassed, and above all the facts and figures cited must be truthful, for the outcome of the case really hinges thereon.

The burden of proof lies with the advocates of municipal ownership, and the arguments in favor of their claim are identical with those of the complete scheme of government ownership.

Can a municipal corporation perform its own lighting service cheaper than a private company can supply it? Figures are given showing the cost of the service when the plant is owned and operated by the municipality, and estimates are made on the cost of building and operating proposed plants, nearly all of which are so surprisingly low that they must at once arouse suspicion in the minds of thoughtful men. According to these reports the cost of public lighting, where it is done by the municipality, averages about one-half of the price usually paid to private companies. One town in Illinois having 120 electric lamps on its streets, even reports that these cost nothing, that the expenses of operating are all paid by the profit received from commercial lighting. It is a significant fact, however, that these figures rarely represent the actual total cost. There is a tendency on the part of the advocates of municipal ownership to underestimate or entirely ignore any items which are not cash actually paid out, such as depreciation in value of plant due to wear and tear, and to the fact that new and improved apparatus and methods are constantly coming into use, interest on capital invested, insurance, taxes, and in some cases water supply. The town treasurer's statement of expenditures incurred in operation is often the only outlay considered, and even this may be incomplete since municipal authorities do not always analyze accounts so as to show a full statement for each department. Insurance and similar expenses may be debited to separate ledger accounts, and not appear at all in the statement of a particular department. Other items are charged to the department where they belong, but under the wrong heading. As a case in point, we may cite the financial statement of Toronto Junction for 1893. Under receipts and disbursements authorized by by-laws for issuing debentures on account of electric light construction, we find an item for rebuilding engine bed of \$162.93. This was a repair, and properly belongs to maintenance.

Now, it is plainly unfair to compare such figures with those paid to private companies and say that a municipality operating its own plant saves the difference. To compare results intelligently we must agree on a basis of comparison. If the price paid a private company is remunerative to them, it includes depreciation, interest, insurance and taxes, and we must therefore debit a municipal plant therewith. The municipality may for a number of years persuade itself to believe that these expenses are imaginary, but it must meet them in the end, and no matter to which account they are charged they are incurred by the lighting plant.

Mr. M. J. Francisco, now president of the National Electric Light Association, last year published a large amount of data on the cost of street lighting, which is of interest in this connection. He gives figures of muni-

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