

CIHM/ICMH Microfiche Series.

1.0

CIHM/ICMH Collection de microfiches.



Canad a Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

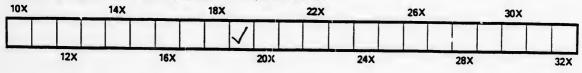


Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy aveilable for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in tha reproduction, or which may significently change the usual method of filming, are checked below. L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une imege reproduite, ou qui peuvent exiger une modification dens la méthode normale de filmage sont indiqués ci-dessous.

	Coloured covers/	Co.	oured peges/
Ľ	Couverture de couleur	Pag	ges de couleur
	Covers demeged/	Pag	ges dameged/
نـــا	Couverture endommegée	Pag	jes endommegées
	Covers restored and/or lamineted/		jes restored and/or leminated/
	Couverture resteurée et/ou pelliculée		es restaurées et/ou pelliculées
	Cover title missing/		es discoloured, stained or foxed/
	Le titre de couverture menque	L Pag	es décolorées, tachetées ou piquées
	Coloured meps/		es detached/
لحما	Cartes géogrephiques en couleur		es détachées
	Coloured ink (i.e. other then blue or bleck)/		wthrough/
	Encre de couleur (i.e. autre que bleue ou noire)	Tre	nsparence
	Coloured pletes and/or illustrations/		ality of print varies/
	Plenches et/ou illustrations en couleur		alité inégale de l'impression
	Bound with other materiel/		udes supplementary material/
	Rellé avec d'eutres documents		nprend du metériel supplémentaire
	Tight binding may cause shedows or distortion	Onl	y edition availeble/
	elong interior margin/ La reliure serrée peut ceuser de l'ombre ou de le		le édition disponible
	distorsion le long da la marge intérieure		
	Black to a constant of		es wholly or partially obscured by errata s, tissues, etc., have been refilmed to
	Blank leaves added during restoretion may appear within the text. Whenever possible, these	ens	are the best possible imege/
	heve been omitted from filming/		pages totalement ou partiellement curcies par un feuillet d'errata, une pelure,
	Il se peut que certaines pages blanches ajoutées	etc.	, ont été filmées à nouveau de façon à
	lors d'une resteuration appareissent dens le texte, mais, lorsque cela éteit possible, ces pages n'ont		enir la meilleure imege possible.
	pas été filmées.		
	Additionel comments:/		
	Commenteires supplémentaires:		·

This item is filmed at the reduction retio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.



e étails s du nodifier r une Image

5

rrata Io

pelure, nà The copy filmed here has been reproduced thenks to the generosity of:

Archives of Ontario Toronto

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies ere filmed beginning on the first page with a printed or illustrated impression, end ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol \longrightarrow (meening "CON-TINUED"), or the symbol ∇ (meaning "END"), whichever applies.

Meps, pletes, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following dlagrams illustrate the method:

1	2	3
---	---	---

L'exemplaire fil mé fit reproduit grâce à la générosité de:

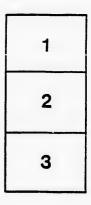
Archives of Ontario Toronto

Les imeges sulvantes ont été reproduites avec le plus grand soin, compta tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exempleires originaux dont le couverture en papier est imprimée sont filmés en commençent par le premier plat et en terminant solt par la dernière page qui comporte une empreinte d'impression ou d'illustration, solt par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençent per la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une talle empreinte.

Un des symboles suivents apperaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole \longrightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, plenches, tableeux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de heut en bas, en prenant le nombre d'imeges nécessaire. Les diagrammes suivants illustrent le méthode.



1	2	3
4	5	6

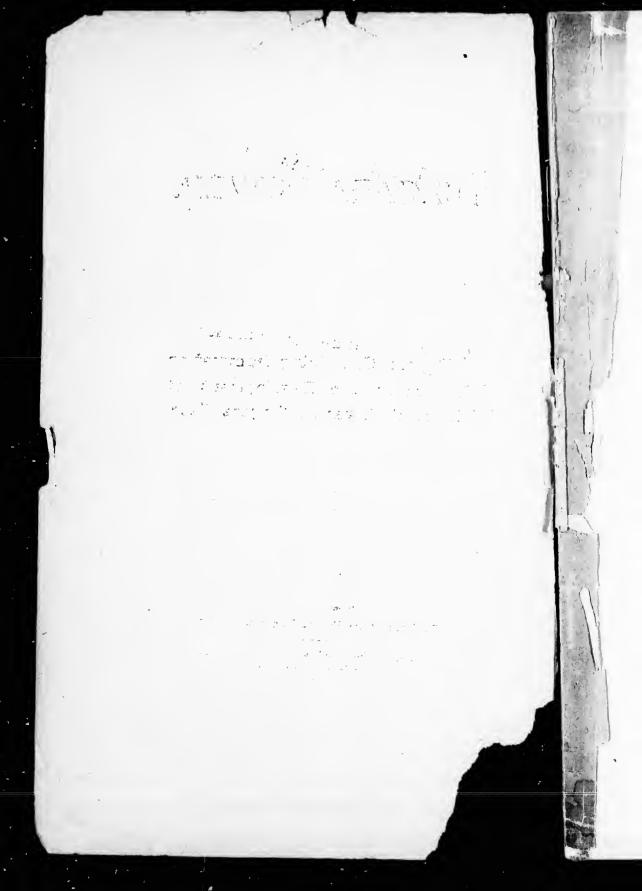
NIAGARA POWER.

40

Report Containing Information Concerning the Development of Electrical Power at Niagara Falls.

Published by the Niagara Falls Board of Trade.

Printed by The "Review" Printing Company, Niagara Falls, Ont. 1897.



Niagara Falls Board of Trade.

TO THE READER:-

Pursuant to a resolution of the Council of the Niagara Falls Board of Trade this pamphlet has been prepared containing brief Extracts from the agreement between the Canadian Niagara Power Company and the Queen Victoria Niagara Falls Park Commissioners representing the Provincial Govern⁻ ment of Ontario and some of the published letters relating to the request of the Power Company for an extension of time within which to *Gomplete* the works undertaken by them.

Attention is drawn to the fact that no Electric Power derived from the Falls is at present in use, except that power developed by the Niagara Falls Park & River Railway Co. and that the Railway Company have developed more power than they require, which is now going to waste.

It is hoped this publication may assist in bringing about a speedy development of Niagara Power and in making available at once the power already developed by the Rail way Company.

R. P. SLATER, President. FRED. W. HILL, Secretary.



Extracts From Agreement Between the Canadian Niagara Power Company and the Commissioners for the Queen Victoria Niagara Falls Fark.

55 Vic. (1892) Cap. 8. p. 110.

"4-The license hereby granted is for the term of twenty years, commencing with the first day of May, 1892, the Company paying therefor at the clear yearly rental of twenty-five thousand dollars (\$25.000) during the first ten years, (the rent to be computed from the first day of November, 1892); the rental for the period from the first day of May, 1892, to the first day of November, 1894, which is fixed at fifty thousand dollars (\$50,000), having been paid to and accepted by the Commissioners in two payments of the sum of fifteen thousand dollars (\$15,000) and the further sum of thirtyfive thousand dollars (\$35,000) paid by the Company at or prior to the execution and delivery of this instrument; the rent for the remainder of the first ten years of the term to be payable in half-yearly payments and at the end of each six months, to wit, on the first days of May and November of each and every year the first of such semi-annual payments to be made on the first day of May, 1895.

The rental for the second ten years of the term payable half-yearly on the first days of May and November as above, shall be as follows:—

The eleventh year	\$26,000
The twelfth year	27,000
The thirteenth year	28.000
The fourteenth year	20,000
The fifteenth year	30,000

The	sixt	eenth	vear.						31,000
The	sev	enteer	th			••••	•••••	• • •	31,000
The	aiah	childer	itti ye	ar		••••	•••••	• • •	31,000
THE	eign	reentr	i yea	r					22.000
THE	mne	teenti	1 year	* • • • •					
The	twer	tieth	Vear				** * * * *	• • •	34,000
		·····	y car .		• • • • •	• • • • •	••••	•• :	34,000 35,000
	*	*							

"5--If at the end of the said period of twenty years the company desire to renew for a further period of twenty years, and shall give notice in writing to the commissioners at least twelve months before the expiration of the twenty years period, they shall be entitled to and shall receive a further lease of such rights for the period of twenty years more at the rental of thirty-five thousand dollars (\$35,000) per annum, and similarly the company shall be entitled at their option to three further renewals at a like rental of thirty-five thousand dollars (\$35,000) per annum, the object and intention of this stipulation being to confer upon the company the right to an original term of twenty years at the rentals hereinbefore specified, and to four further terms or periods of twenty years each at a rental of thirty-five thousand dollars (\$35,000) per annum, making one hundred years in all, and the company shall then give up, or at the expiration of the first term of twenty years, or any subsequent term of twenty years, if unrenewed in accordance with this agreement, the works, premises, rights and privileges by this agreement granted or created without any claim for compensation with liberty to the company to remove their machinery. In case the company desire to terminate the lease, they may do so during the first period of twenty years upon three months notice in writing to the commissioners, or in case the commissioners are not then an existing corporation, the government of the Province of

- · 31,000
- · 32,000
- · 33,000
- . 34,000
- 35,000
- *

ty years the venty years, ners at least enty years e a further irs more at per annum, r option to e thousand ion of this right to an reinbefore of twenty s (\$35,000) company st term of vycars, if he works, ranted or rty to the company g the first riting to not then ovince of

Ontario, payment of rent up to the time of the termination of such notice being made upon the giving of such notice.

"9—The Commissioners shall not grant or confer upon any other Company or person any right to take or use the waters of Niagara River within the limits of the Park so long as this agreement is in force, nor will the Commissioners themselves engage in making use of the water to generate electric or pneumatic power except for the purposes of the Park, saving always in so far as regards the exceptions contained in paragraph 12 of this agreement.

"10—The Company undertake to begin the works hereby licensed to be constructed by them on or before the first of May, 1897; and to have proceeded so far with the said works on or before the first of November, 1898, that they will have completed water connections for the development of 25,000 horse power and have actually ready for use supply and transmission 10,000 developed horse power by the said last mentioned day."

"11—The Company whenever required shall from the electricity or pneumatic power generated under this agreement supply the same in Canada (to the extent of any quantity not less than one-half the quantity generated) at prices not to exceed the prices charged to cities, towns, and consumers in the United States at similar distances from the Falls of Niagara for equal amounts of power and for similar uses, and shall whenever required by the Lieutenant-Governor in Council make a return of prices charged for such electricity or power, verified under oath by any chief officer of the company, and if any question or dispute arises involving the non-supply or prices of electricity or power for consumption in Canada, the High Court of Justice of Ontario shall have jurisdiction to hear and determine the same and enforce the facilities to be given or the prices to be charged."

"13—If the company should at any time or times continuously neglect for the space of one year effectually to generate electricity or pneumatic power as hereby agreed by the company, unless hindered by unavoidable accident, the Lieutenant-Governor in Council may then and from thenceforth declare this agreement, the liberties, licenses, powers and authorities thereby granted and every of them to be forfeited and thenceforth the same shall cease and determine and be utterly void and of no effect whatever." ged." imes continuy to generate by the comthe Lieutennceforth depowers and be forfeited nine and be

Niagara Falls Power.

7

Letter From Mr. A. D. Shaw, President of the Co.

HISTORY OF THE COMPANY.

Reasons Why an Extension of Time is Asked—Answers to those Who are Opposing the Application—Cogent Reasons Why Delay in Development was Neccessary.

(To the Editor of the Toronto Globe.)

Sir,—Considerable discussion and correspondence has appeared in the press in reference to the so-called monopoly of the Niagara Falls power, and an agitation is attempted to be raised against the previous grant to the Canadian Niagara Power Company, and in any event against any extension of time named under such agreement for the development of power in the Niagara Falls Park. I think it is proper that the public should be made aware of the real facts in regard to the matter, and should appreciate what is at the bottom of what is apparently a popular uprising in the Niagara peninsula.

In April, 1892, the Canadian Niagara Power company was incorporated by an act of the Provincial Legislature, and given the right to develop power in an inconspicuous manner in the Niagara Falls Park for transmission and use beyond the park limits upon terms and conditions which preserved the natural beauty of the park. gave the commissioners judicious control of the development. and for which Sir Oliver Mowat,

then attorney-general. exacted the very handsome rental of \$25-000 per annum, to be increased after the tenth year at the rate of \$1,000 a year and amounting to \$35,000 from the twentieth year. (It is to be observed that on the American side a similar franchise was granted without a dollar being charged by the Government.) He also provided that "The company whenever shall from the electricity or pneumatic power generrequired ated under this agreement supply the same in Canada (to the extent of any quantity not less than one-half the quantity generated) at prices not to exceed the prices charged to cities, towns and consumers in the United States at similar distances from the Fails of Niagara for equal amounts of power, and for similar uses, and shall whenever required by tho lieutenant-governor in council make a return of prices charged for such electricity or power, verified under oath by any chief officer of the company, and if any question or dispute arises involving the non-supply or prices of electricity or power for consumption in Canada the High Court of Justice of Ontario shall have jurisdiction to hear and determine the same and enforce the facilities to be given or the prices to be charged."

8

REASONS FOR DELAY.

So advantageous to the Province were these terms considered that the act of incorporation of the company, containing a confirmation of the previous agreement in troduced by the attorney-general, was passed by the Legislative Assembly without an objection or dissenting vote, and with the approval of both sides of the house. The agreement was the result of a conditional contract, which had been executed by the Park Commissioners with myself, formerly resident as United States Consul at Toronto, I then representing Lord Wantage, Col. Lake, the famous electrician Ferranti, all of ome rental of oth year at the 000 from the on the Amerd without a .) He also required Ľ ower generanada (to the the quantity rged to cities, ilar distances power, and tho lieutencharged for any chief spute arises v or power f Justice of ermine the prices to be

terms conpany, conin troduced slative Asd with the ent was the ecuted by esident as ing Lord nti, all of London, England, and some Canadian triends. A payment on account of the franchise had been made by my English associates, but they were not prepared to go on. There was no outlook for the use of the developed power in the neighborhood of the Falls. The then state of electrical art did not warrant the expenditure of money in the hope of realizing profits from long-distance transmission. I turned to the company which was commencing the development upon the American side of the river. They joined us, and today they have the majority of stock in the Canadian Niagara Power company, although my English and Canadian associates still own a very large interest in the company.

The development of power in large units from such a body of water as passes over the Niagara Falls and also the generation of large units and transmission for long distances

f electricity were entirely new experiments, and it was ablutely necessary that the greatest care should be used in the introduction of untried machinery in such a colossal undertaking in order to prevent the loss of an immense amount of money, and when the company was negotiating the agreement the officers explained to the Government that their intention was to wait the experiment on the American side, and so soon as those works were completed and long-distance transmission commercially proved, then to duplicate them on the Canadian side. The completion of the works on the American side has been delayed by difficulties which always beset and are inseparable from great and novel undertakings. The company could only assure itself that it was securing the most useful machinery by the fullest inquiry and the most careful experiment. Some idea of this may be obtained when the public are informed that \$25,000 were offered as prizes for the best set of hydraulic and electrical plans, and the services of Lord Kelvin (the greatest living British

scientist) were obtained as the chairman of a commission to adjudicate upon the various proposals that were put forward and upon the selection of which the saving or losing of such a large amount of capital depended. A mistake in the method might involve the loss of the whole capital outlay, and, therefore, great care and attention to detail the recessary, with the result that the works on the American side are still somewhat in the experimental stage as to long-distance transmission. Five millions of dollars have been expended in the capital account of the company there. This great expenditure evidences the gigantic nature of the undertaking as well as the financial standing of those at the back of the enterprise.

THE EXTENSION OF TIME.

In consequence of what I have said the Canadian company have found it necessary to seek for an extension of time for eighteen months in order to see before beginning what further changes are necessary or desirable, so that when commenced the work may be pushed through with the utmost rapidity, and with the assurance born of experience that the proper methods are being adopted, and the machinery which is intended to be placed is the best of its kind, so as to provide power at distances at the cheapest possible rate, because the cheaper the rate the more encouragement to manufacturers and others to acquire same, and the greater amount can be sold and the power and machinery of the company utilized to the best advantage. It is true that the German Government had shown the possibility of transmitting electrical power long distances in connection with the Frankfort Exposition of 1890, but that was not a commercial success. Small units of electrical power have been transmitted in the United States and in Switzerland distances of 50

commission eput forward sing of such take in the pital outlay, were necescan side are ong-distance expended This great undertaking ack of the

dian comtension of beginning that when th the utxperience e machinkind, so sible rate. ement to greater v of the that the transmitvith the nmercial ransmits of 50

miles. The company was fully aware of the transmission from Tivoli to Rome and at Telluride, Colorado, but the Niagara undertaking is on much larger and entirely different lines. Surely it is not an unreasonable request in view of the fact that the Canadian company have already paid the Government \$100,000, and are consequently most anxious to push development, so that they may get some return for this money and the enormous rental they have to pay per year, and some return for the great expenditure that is necessarily involved within the next three years before they can hope to earn a dollar upon their capital. As I have pointed out, the company are only asking an extension of the time under the agreement for eighteen months, and are only asking this so that they may be assured they are going ahead in the right direction once they begin.

OBJECTIONS URGED.

Under the terms of agreement the company undertook to begin work on May 1, 1897, and to have proceeded so far with the said works on or before the 1st of November, 1898, that they will have completed water connections for the development of 25,000 horse-power, and have actually ready for use, supply and transmission 10,000 developed horsepower by the said last mentioned date. The cry is raised that the Legislature should not have granted this monopoly, as it is called. Surely it has become apparent, where an expenditure of millions is necessary in order to obtain a result, that unless the control of the undertaking is given to some person or company capital cannot be induced to come in, and one reason why industries have so progressed in the United States is that capital is welcomed to make an investment, the public appreciating that nature's resources will be undeveloped without this encouragement of capital. If the power

ΙI

of the Falls was to be divided up among half a dozen or more people no one would put in the necessary plant for the development or transmission of electricity, if the latter can now be said to be feasible. The enormous expense incident to such an undertaking makes it absolutely important that some franchise should be granted before capital can be induced to venture upon such an enterprise.

The next objection that has been taken is, that the American side is being developed at the expense of the Canadian. It has already been pointed out that upon the American side some five millions have been expended on capital account, and, until this autumn, without any return; and, with the exception of two manufactories moved from the coal regions, no manufacturers from outside places have been induced to come to the American side. On the Canadian side no bona fide demand for over 1,000 horse-power has been made locally, and such horse-power has only been asked for by the two American industries above referred to, who contemplate establishing Canadian branches. power can be obtained at any time by arrangement with the This Park Electric Railway company, who have surplus power which they will be glad to have utilized if the Government will permit such an arrangement to be made between our selves and the Railway company. In face of the depression that has existed all over the country during the past few years, is it not idle to talk about manufactories that would have sprung up?

IMPORTANCE OF ENPERIMENT.

The importance to Canada and to the United States is in the solution of the problem as to whether electricity can be successfully transmitted for long distances, and if the development work was to be retarded beyond reason, or not com-

a dozen or more plant for the the latter can xpense incident important that ital can be in-

, that the Amse of the Canupon the Amexpended on it any return; s moved from e places have On the Cano horse-power has only been ve referred to, nches. This nent with the urplus power Government between our_ ne depression the past few that would

d States is in icity can be the developor not completed (in case of the inability to successfully transmit long distances), Hamilton, Toronto and other Ontario cities and towns might well be disappointed. If, however, all that is asked is a delay of eighteen months to properly demonstrate the successful operation of long distance transmission on the American side to Buffalo, a distance of 26 miles, so as to give Canadians the best possible results once the project is under way, are not these cities the gainers? If the present company should retire from this enterprise it would mean that some other company would have to begin experiments, and which would await the result of the experiment upon the other side. As it is, the cities of Hamilton and Toronto are assured of having a substantial company complete with the best possible machinery, with little likelihood of breakdowns or mishaps, and with an act which limits the price that can be charged to the same price as is charged on the American side. Applications of a nebulous and indefinite character have been hinted at by visionary inventors representing products not yet produced commercially, and by anxious real estate brokers looking for "booms" and pretending to know of large manufactories anxious to use Canadian Niagara Power.

The company has offered to commence work upon the satisfactory agreement of any reliable person or persons or corporations of financial responsibility to take in the aggregate and pay for 5,000 electrical horse-power for local use for a definite period.

THE COMPANY'S REQUEST.

In a word, I have pointed out the enormous advantage of having the present company, which has paid so much money into the public coffers, which it would have absolutely lost if the experiment proved a failure, being allowed to complete its experiments and assure itself of having the proper machinery, and then proceeding to push the work as rapidly as possible. The only request the company are making is that they be given eighteen months further time for completion of the work, and it is to be borne in mind that at the time the agreement was formed it was pointed out that while it was supposed the time granted was long enough no work would be commenced until the experience of the American company had proved whether electricity could be successfully generated and transmitted or not, and it is only carrying out the original understanding. It is to be borne in mind that if the yearly income it has paid was not forthcoming it would require a special yearly appropriation of public moneys of \$25,000, which is now received from the company, and which the company has so far not received one dollar's benefit for.

The engineer, Mr. Jennings, who has written a letter, perhaps would not take the same view were it not that he has been connected in the past with a rival company. Mr. Wilson, who talks airily of 60,000 horse-power to the Hamilton Board of Trade, is well known in the United States, and is one of those gentlemen who were admirably represented by the portrayal of the genial Col. Sellers in the Gilded Age.

The indignation in and about the Niagara Falls itself is being largely developed by one or two real estate investors, who themselves are Americans and who are seeking to create a "boom" on the Canadian side.

Something has been said about the Canadians not sharing in the benefits. I can say that when the securities of the company are ready to be put upon the market the Canadian public will be given ample opportunity of investing to as large an extent as it desires in the undertaking.

ALBERT D. SHAW.

Toronto, Jan. 29.

President of the Canadian Power Co.

arther time for n mind that at inted out that ang enough no ce of the Amercould be sucand it is only to be borne in was not forthpropriation of ived from the pt received one

itten a letter, not that he has company. Mr. to the Hamed States, and v represented e Gilded Age. Falls itself is ate investors, sing to create

ns not sharurities of the he Canadian esting to as

n Power Co.

NIAGARA FALLS POWER.

Some of the Reasons why an Extension of Time Should not be Granted the Canadian Niagara Falls Power Company.

No question of such vast importance to Ontario has arisen in many years as that which is being discussed throughout the province today, namely: Shall the Canadian Niagara Falls Power company, who have for five long years tied up the power at the Canadian Niagara Falls, be granted the right to continue their monopoly for another term?

The facts leading up to this question are too well known to need repeating here, and the writer will confine himself almost solely to answering statements made by Col. A. D. Shaw in a letter to the Globe of Saturday last. We will give facts that Col. Shaw or any member of the Cataract Company will not care to dispute.

The Colonel says truly that the American government gave the franchise for nothing, while Ontario receives \$25,-000 per year for the same privileges on this side. True—and why? Because the Americans shrewdly saw far greater benefits in the development of power than from the revenue that would accrue from a mere rental.

The Colonel speaks of the rental received from the Canadian company as being so advantageous to the province, while the facts are that the American Cataract Construction Company is the concern that is paying this money into the treasury, and that company owns the Canadian concern body

The best evidence of this is gleaned from the report of the board of directors of the Cataract Construction company, issued on Dec. 15 last, which says :

"And the other \$372,225 from 19,475 electrical horsepower after January 1, 1898, will be sufficient for the rent for Canadian rights and the interest on \$7,000,000 of bonds."

The colonel's principal plea for an extension of time to begin work on Canadian soil is that the long-distance transmission of power was still in its "experimental stage." It will be interesting to again quote from the directors' report, issued only a few weeks ago, and see what it has to say as to the experimental stage, whether that interesting point has been passed or not :--

"The present electrical installation comprises three dynamos, each of 5,000 electrical horse-power, of which one should be kept as a reserve; but the demand has made such reservation impossible, and the contracts already made for 15,825 electrical horse-power exceed not only the prudent, but the actual capacity of these works, which require immediate extension, with every prospect of prompt and profitable employment.

Since work was begun in 1890, no interest in the Cataract Construction Company is known to have been sold for less than par; notwithstanding at least four financial crises, and other influences deterring the establishment of new industries requiring power. Considering these general and well known adverse conditions coincident almost with its life, the wonder is that this company has steadily progressed, and, as above indicated, has almost reached the point of self support. Under such conditions, and in view of the necessarily experi-

money into the n concern body

n the report of ction company.

lectrical horseor the rent for of bonds."

on of time to listance transal stage." It ectors' report, s to say as to ng point has

prisés three f which one s made such y made for he prudent, require imprompt and

the Catarn sold for cial crises, of new inal and well ts life, the ed, and, as lf support. ly experimental character of the work, it would have been folly at any earlier date to seek to provide for an installation larger than necessary to demonstrate that this enterprise can accomplish real work and promise real profits, such as can now be expected after January 1st, 1898.

"This promise is based upon the proposed completion of the installation up to the point at which it will be possible to develop at Niagara for commercial requirements 35,000 available electrical horse-power from eight dynamos, each of 5,000 horse-power, (one being kept in reserve,) and to complete the Buffalo transmission line so that it will be sufficient to deliver in Buffalo 10,000 electrical horse-power, as required by the municipal franchise."

There you see that the Cataract Construction company has so far passed beyond the experimental stage that after having expended five millions of dollars it is prepared to go on and spend another two millions: and is prepared to go on and duplicate at an enormous cost the very machinery that the Canadian government is told is yet in its experimental stage. The present capacity of 15,000 horse-power is to be at once increased to 35,000 horse-power, and yet the Colonel tries to stuff Canadians with the bosh, that his company is only experimenting! Would any sane (not to say shrewd) company of business men add millions to an already large outlay unless experiment had been passed and success achieved? It is true that changes will be made in electrical machinery, and they will be made twenty years hence as well, but that is no reason why Canadian power should lie dormant while American po gathers in all the benefits that follow the development of Niagara Falls Power.

Another plea of Col. Shaw's is that there is no important demand for power on the Canadian side. His own communication proves the falsity of this by saying that two companies will establish branches on this side as soon as power can be furnished for them. Besides, power when once developed creates demand; it draws factories to the fountain head. And in this connection, Col. Shaw makes a serious misstatement when he says that only two local factories have been attracted to Niagara Falls, N. Y., by the power there developed. Let us see what Mr. Rankine says about this in the Electrical Engineer of January 6, 1897. Here is the list he gives.

HYDRAULIC POWER.

Niagara Fallls Paper Co.,	П. Р.
Pittshum D. I. ELECTRICAL POWER.	7,200
The Carborundum Co. (aluminum)	3,050
Acetylene I H & D C (Carborumdum)	1,000
B. & N. F. Elec. Light & Power Co. (local lighting)	1,075
lighting)	500
Niagara Electro-Chemical Co. (and	500
B. & N. F. Electric Railway (1	400
	250
(All from October <i>i</i> , 1896.)	250
Duffalo Street Ry, Co (22 miles turns 1	1,000
Acetylene Light Host & Day	
(From March 1, 1897) (From delivery say New 2010)	1,000
(From delivery, say, Nov. 1, 1897.)	1,000 2,000
Mathieson Alkali Works (soda ash)	-,000
(From June 1, 1897.) Buffalo Street Railway Co Buffalo General Electric Co. (lightian)	2,000
Buffalo General Electric Co. (lighting)	,000
(From November 15, 1897)	3,000
Totals	,225
10tal DVdraulic power - 11 DV	200
Total electric power sold—Niagara	,200
Total electric power sold—Niagara	,000
Albricht & HUI ADDITIONAL. 25,	225
Albright & Wilson, Ltd. (electro-chemicals	400
1896 – Grand total 25,0	
25,0	525

n head. And misstatement been attracted eveloped. Let the Electrical ne gives.

H. P. ... 7,200 • • • 3,050 · · · 1,000 ... 1,075 cal • • 500 • • 500 of • • 400 • • 250 • • 250 ·· 1,000 ·· i,000 · · 1,000 · 2,000 · 2,000 · 1,000 · 3,000 25,225 · 7,200 .13,025 • 5,000 25,225

400

25,625

Dobbie & Stuart's foundry has also been located, and the Smith bicycle factory will be an applicant for power very soon. Nearly all of which is an outgrowth of the development of power at Niagara Falls, N. Y. Mr. Rankin and Col. Shaw should have compared notes before the latter rushes into print with the *real* facts. And these statements are not made at random. They are verified over the signature of Wm. B. Rankine, secretary of the Cataract Construction Company. Although the idea in the first instance in establishing this great work was to create power to transmit to Buffalo and other American cities, there is no doubt that the formation of the Cataract Company was based solely on transmitting power to take the place of existing steam power in ' adjacent cities.

The true state of affairs is that the American side is being developed at the expense of the Canadians, whose power is tied up by the very company that is expending millions to build up the American side. We feel confident that the government of Ontario will not permit this injustice to be perpetrated upon her people.

As to long distance transmission, just read what the General Electric Company alone is doing on this continent, from the Electrical World of Jan. 22, 1897:—

	VOLTAGE	
Н. Р.	OF LINE.	DISTANCE.
1,466	10,000	8 miles.
823	11,000	12 miles.
3,420	10,000	10 miles.
12,000	4,400	9 miles.
11,050	15,000) 25,000)	40 miles.
3,000	10,000	10 miles.
12,000	6,000	8 miles.
1,170	10,000	21 miles.
4,600	6 ,0 00	14 miles.
10,982	11,000	22½ miles.
	1,466 823 3,420 12,000 11,050 3,000 12,000 1,170 4,600	H. P. OF LINE. 1,466 10,000 823 11,000 3,420 10,000 12,000 4,400 11,050 25,000 3,000 10,000 12,000 6,000 1,170 10,000 4,600 6,000

Lowell, Mass. Fresno, Cal. Salt Lake City, Utah Pelzer, N. C	2.275	,	15 miles. 35 miles. 13 miles.
	7,010	3,300	31/2 milios

And y et the president of the Canadian Company wishes us to believe that long distance transmission is in its infancy !

It is admitted by the estimates given the Construction company that the Canadian tunnel can be built for about onetenth of the cost of the American tunnel, and yet millions additional are to be spent over there while our power is held idle in the iron grasp of this monster monopoly. And they say, too, that Canadians are guaranteed that power will be furnished Canadian factories at the same rate as those of the towns and cities of the American side! Why should Canadians pay the same rate for power as the Americans, when it only costs one-tenth the money to produce? Canada is a tremendous loser by this phase of the agreement.

With such advantages in favor of Canada's power, why is not a portion of the many millions spent on our soil? Is it because the scheme is in its experimental stage? Oh no? It such were the case, why does not the Cataract company make the experiment on the Canadian side at 1-10th the cost, and if, as alleged by the Colonel, there is no market or demand for the power there, could they not transmit it to Buffalo, and by a shorter line than they now have from their American works?

Surely Col. Shaw could not have read the report of the board of directors of the company in which he is interested when he wrote the letter of Saturday last. As the public may not have had the opportunity of reading this official report, for their information we again make an extract or two:

"Such installation we again make an extract or two: expected, promptly to produce a net income of over \$600,000, against which the bonded interest will not exceed \$450,000 (after funding all interest up to January 2, 1898), leaving a

20

15 miles. 35 miles. 13 miles. 14 miles.

iny wishes us infancy ! Construction r about oneyet millions ower is held And they wer will be pose of the hould Can. us, when it anada is a

wer, why soil? Is it Oh no? Companythe cost, r demand ffalo, and American

t of the nterested e public ficial reor two: t, and is 500,000, 450,000 wing a probable dividend fund sufficent for five per cent. upon the stock, and all the vast remaining lands, properties and right^s of the company for future development.

"The proposed extension involves doubling the present capacity of the transmission line to Buffalo which is now delivering 1,000 electrical horse-power; the extension of the wheel-pit for its full length so as to have a capacity in all for ten 5,000 horse power turbines and dynamos; the installation of seven 5,000 horse-power turbines and dynamos, in addition to the three now in operation; and the extension of the power house to cover the new installation. Such an extension of the wheel-pit is about one-third completed; the right of way from Niagara Falls to Buffalo is complete; the pole-line already erected has a pole and cross-arm capacity of 20,000 electrical horse-power with copper conductors in place for 5,000e lectrical horse power. Upon definite proposals already received, the entire installation above described can be progressively completed before April 1, 1898, with the proceeds of the subscription of \$2,000,000 now invited and already largely taken."

Let Col. Shaw no longer talk of the experimental stage until the company rescinds such statements as the above. Col. Shaw handles the visionary inventor in a slighting manner when Canadian power is the question, but does not hesitate to negotiate with this same "visionary inventor" for 5,000 American horse-power to manufacture carbide. Millions for the United States not one dollar for Canada, is Col. Shaw's too-trasparent motto, and the trend of the Watertown gentlemen's article is all on the same line—belittling the Canadian claims and making himself a special pleader for the Cataract Company. He tries to make capital by referring to real estate dealers. It would make interesting reading if the Colonel would furnish us with a history of some of the early real estate transactions of others-to which we may refer later.

Why did the company purchase the right of way along the Canadian side from Chippawa to Fort Erie unless they intended the power to be first sent to Buffalo, if developed? If they intended Canadian cities to have an equal chance with American cities, why did they not at the same time buy right of way to St. Catharines and Hamilton? Perhaps Col. Shaw can tell us. Or, is this line purchased as a duplicate to their American line?

The government should and will remember that the Cataract Construction Company's ownofficial report places the "experimental stage" as a thing of the past, and records an order being placed for thousands of dollars' worth of electrical machinery--while Canada's claims are asked to be set aside until the Americans securely fusten their grasp upon all the benefits that can be got from the "harnessing of Niagara." The fact is that the Cataract Company base the assurance of a fabulous future income on the strength of owning all Niagara's power, to be developed by them for their own profit.

And here, too, is a matter that should be of paramount importance in arranging a new agreement, namely: If the government should feel justified in granting a short extension of the franchise, one of the prime conditions of this extension should be to allow other responsible companies to discharge water through or under the park property, or both—so long as said companies do not mar the beauty of our national park, (which is a credit to our local government and of which we Canadians are justly proud,) and under the supervision of the efficient park superintendent. In other words, no company should ever be given the exclusive franchise of all the power privileges in or about the Falls. The extension of an exclusive franchise would be fatal to the prosperity of Canada, so far as the benefits of electricity from the Falls is concerned,

and the government would find it difficult to justify itself betore the people in such an act. As Col. Shaw says, there would be such a popular uprising against it that the government could not, and would not, ignore it.

That your readers may realize the enormous value of the power under question, we quote from the speech of Sir William Siemens before the Iron and Steel institute of Great Britain in 1877. He said: "The force of the principal or Canadian falls is estimated at 16,800,000 horse-power. In other words, all the coal raised throughout the world would barely suffice to produce the amount of power that continually runs to waste at this great falls."

The Globe of November 19, 1896, says. "What this means will be better understood by the statement that all the power used in Toronto for street cars, elect**f** ic lighting, pumping of water and operation of factories is a trifle over 16,000 horse-power! The company (meaning the Cataract Construction company) already in operation at the Falls has, therefore, charter rights to develop power enough to do all the work of twenty-eight cities as large as Toronto."

That Col. Shaw is now filling the *role* of special leader for the company is nowhere better evidenced than in the fact that while the gallant colonel is championing the experimental-stage idea for his American friends, the latter are duplicating machinery that was made *two years ago*. The experimental stage will never pass, so long as it is to the interests of the American capitalists to keep the Canadian power out of the market. As an evidence of Col. Shaw's mission as a special agent for the Construction company, we find him chaperoning the editors of leading Canadian journals at the Falls no later than Tuesday of this week. Is this special trip in the interests of Canada, Colonel, or is it a part of the Construction company's plan to perpetuate -its monopolistic grip upon our franchise ?

The people of Ontario look to the provincial government for fair play in this vital matter, and rest their case in their hands with full confidence in their verdict of the people's representatives. Your obedient servant,

H. C. SYMMES, M. C. S. C. E.

Niagara Falls South, Ont., Feb. 4, 1897.

24

*

NIAGARA FALLS POWER.

EDITOR WORLD:-

From Mr. Albert D. Shaw's letter published in your issue of the 30th, he would make it appear that the people o Niagara Falls and vicinity are asking the government to be severe with and push the terms of the contract with the Canadian Niagara Power Company to the utmost and that we did not wish to deal fairly with the Power Company. This is not the intention. If the Power Company should commence their works and by any misfortune be not able to complete the work within the specified time there would be no objection to any reasonable extension. The company have had the contract since April 14th, 1892, five years nearly. Have they purchased any land on which to locate any works? Nothing beyond about five acres above Dufferin Islands and a strip 30 feet wide along the Michigan Central Railway from Chippawa to Fort Eric, about 12 or 15 miles. On the American side they purchased, at or before the time they started their tunnel, from 1500 to 2000 acres. They have still until November 1898 to construct their power here, If they mean to do so, why not commence as per agreement, and then if they cannot finish ask for a fair extension and no one would object.

Prominent citizens here nearly all feel that the Power Company do not intend to build at all on this side and are only paying the rental to enable them to lease all their land on the American side and then drop the Canada lease. They have been over a year attempting to arrange with the Electric

Railway to supply electrical power and up-to-date have not yet completed the transaction. The Town of Niagara Falls cannot get power to run an electric light plant to light their town.

Surely we are not unreasonable in asking the Government to give us a chance to utilize some of the immense power running to waste. While our American neighbors are using from 50 to 70 thousand horse power and arranging to quadruple that amount, we are only allowed about 100 or 200 horse power to pump a little water for the town, and while new uses for electricity are being discovered daily, we have to sit idly by, a secluded quiet country village, and allow an immense foreign monopoly to thwart every effort we make to secure a small share of our legitimate rights that should be obtained owing to our favored location.

As to Mr. Shaw's statement that the Power Company will start as soon as they can secure a contract for 5,000 hore power, if he will stipulate the price he will charge for the power and the approximate time he will have it ready, there will be little difficulty in getting the contract, if price is in proportion to cost of construction and maintenance of the power here. He further says they pay nothing on the American side. He forgets that Mr. Stetson stated in Buffalo that the building of the work was so much cheaper on the Canada side that it was far better and much cheaper to pay that amount than it was to build on the American side where they pay no rent.

R. P. SLATER,

Niagara Falls, Ont.

NIAGARA FALLS POWER.

TO THE EDITOR OF THE GLOBE:--

Sir,---Refering to the recent protests from the Council and Board of Trade of this city against the granting by the Ontario Government of any extension of time for the commencing of operations by the Canadian Niagara Power Company, would you allow me space to say that although every aspect of this question might seem to have been fully discussed in the press, as well as elsewhere, there are yet many who do not understand the subject nor its importance. Published statements are so often tinged with political, personal or local sentiment, that it is difficult for the general reader to get unbiased information from which to form a definite opinion. There is, however, one potent reason that everyone can understand why this extension of time should not be granted, which is, that this franchise or charter for 100 years is now shown by the experience and knowledge gained during its first five years to be eminently unfair to the people of this Province. The simple facts are these:--Ontario receives \$25,-000, to be increased in ten years to \$35,000 per annum, for this monopoly (equal to about one cent. per year for each inhabitant) during the pleasure of the company, who alone have the privilege of cancelling the charter any time up to 100 years. The power can be produced much cheaper from the Canadian side, yet nothing has been done to develop the power on this side during these first five years, and when it is developed we Canadians who own the Canadian falls must pay the same price for power as is charged on the American

side, and cannot command more than 5,000 horse-power for 100 years, unless it suits the company to supply more. The rental mentioned bears no proportion whatever to the value of the franchise, with all the acknowledged possibility of electric science in the future, as it may prove to be worth millions instead of thousands of dollars. Let us look back on the progress of the past century and consider whether we dare predict the position or value of any such privileges during the next 100 years. Take any monopoly that was given by any country a century ago and imagine what its condition or influence would be at the present time, had it received its franchise for 100 years. Patent rights are only another form of franchise or monopoly, but what country to-day would grant a patent for 100 years? What would have been the effect on manufacturing and trade had James Watt's patent or monopoly on the steam engine been given for 100 years? The Niagara Falls in the light of present electrical knowledge a sort of valuable birthright to this Province, forms not measureable by a money rental, when such rental means the entire loss of its control by the people or Government of the Province for a possible 100 years. The argument, therefore, that the Government should not lose the present company's rental until "another company" is prepared to take its place, is scarcely worthy of an independent people. Who would take the trouble to get up "another company," and what capitalists would waste their time listening to the "ifs and buts" of promoters of a new company to take the place of the present one while it has possession of the monopoly and has not made known any intention whatever of giving it up? Is it, therefore, business-like or reasonable to expect that any new company could be formed to rent the use of the Canadian falls water-power for the benefit of the Province, as well as its own shareholders, while such privilege is already tied up for a possible 100 years? It may yet be demon-

strated in the event of the cancellation of the present franchise that it would pay the Province much better to give the franchise entirely free under Government control for manur facturing and other purposes to its own inhabitants as an incentive to increased population and foreign trade in the Province, for the results of such a wonderful power can be limited only in proportion to the progress of electrical science W. A. ROBINSON,

President Hamilton Board of Trade. Hamilton, Feb. 9.

RESOLUTION PASSED BY THE MUNICIPAL CORPORATION OF THE TOWN OF NIAGARA FALLS-DEC. 7th, 1896.

POWER COMPANY.

Whereas it has come to the notice of this council that an application for an extension of time in which to commence operations for the building of a certain power tunnel to be constructed by the Canadian Niagara Power company, who hold certain privileges more fully set forth in the agreement between said company and the Queen Victoria Niagara Falls Park Commissioners, has been made by said company to the Government of Ontario. And whereas this council are aware that such extension, if granted, is not in the best interest of this locality and the country in general, for the following and other reasons .- That said company hold very valuable exclusive privileges, and have had, in this council's opinion, sufficient time wherein to mature their plans, and as the construction of the proposed tunnel will take some long time to complete, to delay commencement not only means the lapse of the term asked, but the additional term or time necessary for constructing, thereby delaying progress, and the opening of one of the greatest powers on this continent. That notwithstanding the annual rental now being paid by said com pany, is not of sufficient consequence compared with the benefit that would arise from a speedy development or utili zation of the waters of the Niagara. That a dangerous rival is being perfected in the adjoining country, and to further delay, only gives to this rival greater opportunities to conclude long leases for power with the adjoining cities and corporations, to the disadvantage of this country. That many corporations have expressed their desire for power and the establishing of manufacturies in the vicinity, where power is obtainable. We therefore petition your honorable body to refuse the applicaof the said company.

