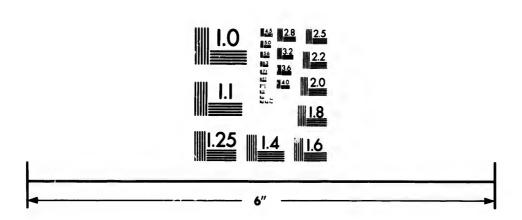


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# EMMERSON'S BRIDGES.

# Favored Contractors Enriched at Taxpayers' Expense.

Direct and Absolute Evidence That the Government Paid Two and Three Prices for Bridges.

What Engineers Holmes and McCarthy have to Say--Engineer Murphy of Nova Scotia Contradicts Emmerson.

Chief Commissioner Had No Fault to Find with Dominion Bridge Company's St. George's Contract.—The Very Significant Date of Some Former Bridge Contracts.—An Unanswerable Arraignment of the Provincial Government.

During the last six years a provincial debt of more than half a million dollars has been incurred for so-called permanent bridges. Previous to 1894 the steel superstructure of these bridges was furnished by tender, the contract going to the lowest bidder. Soon after Mr. Emmerson succeeded Mr. Ryan as chief commissioner of public works this system was abandoned.

During the last five years the work has been given out by private contract to favored contractors at rates always 100 per cent. and usually more than that above the market price.

in 1397 \$36,000 was paid to one favored firm for three steel bridges. One half of this money was a present from the Emmerson government, given at the public expendent the Record Company of Moncton.

One of eight or ten ridge builders in Canada would have usen glad to get these contracts for \$13,000. But these contracts were by no means the worst. It can be shown conclusively that three and even four prices have been paid to favoured bridge contractors.

# THE ENGINEER'S NAME.

The lengineer engaged by Mr. Hazen was A. R. Holmes, C. E. Mr. Holmes is a graduate in en-

gineering of Kings College, Windsor. He left college with high recommendations from Doctor Butler, formerly professor of engineering in King's. He served for some time on the envincering staff of the Nova Scotia public works department, and afterwards in the engineering staff of the Intercolonial, and resigned from the government service to take a special course in the Institute of Technology at Boston. There can be no question of his competence to perform the work required of him. Moreover his report speaks for itself. Here it is:

# THE ENGINEER'S REPORT.

Dear Sir—In accordance with your instructions, I personally visited the grounds and made measurements of the following highway bridges erected by the local government of New Brunswick as follows:

Lefebvre—2 spans, 200 feet each.
Blackville—3 span, 1 centre span 200 feet, end spans 80 feet.
Hutchinson Brock—2 spans, 1 centre

Hutchinson Brook—2 spans, 1 centre span 88 feet, 2 end plate girders 33 feet.

Tahor's—1 span, 150 feet. Cuissack's—1 span, 153 feet. Petitoodiac—1 span, 110 feet. Eigin—1 span, 113 feet. Campbell's—1 span, 240 feet.

WEIGHT OF THE BRIDGES.

I made all measurements of these

structures with steel calipers, tested metallic tape and Chesterman's steel rule, and I think you can rely upon their accuracy. Attached to this report are details of the measurements of the several members of each structure. From these measurements I have made up the weights of each tridge, as follows:

	Lbs
Lefebvre—2 spans, 113,664 lbs. each, total 2	37.328
Blackville-3 spans, 118,664, 27,212	,
27,212, total 1	73.088
Hutchinson's—1 span, 26,018, 2 spans plated girders (11,096)	
total	48,210
Tabor's1 span ?	2,275
Cuissack's-1 span	75,151
Petitcodiac-1 span	36,381
	45,749
Campbell's—1 span	51,972
Total 89	10,154

## UNDER THE TENDER SYSTEM.

To make comparison between the highway orldges built in New Brunswick and those of Nova Scotia erected by their local government, I have obtained plans containing the data upon which public tenders are invited in that province. A full list of the tenders received for each structure will be found in the provincial engineer's annual report, copies of which I enclose herewith for the past four years.

The weights of the several structures are not given in the annual reports, but from the plans and other data I am enabled to make up a very close estimate of the weight of each, which I think you can safely rely upon within 5 per cent., and which will afford you a basis of comparison between the cost of these structures as built by the respective governments of Nova Scotla and New Brunswick.

Below is a list of a number, the weights of which I have worked out in detail as per sheets herewith attached

1 span, 80 feet; weight, 26,739 lbs. 1 span, 100 feet; weight, 28,111. 1 span, 120 feet; weight, 39,047.

1 span, 160 feet; weight, 65,232. 1 span, 200 feet; weight, 129,137.

#### UNDER THE NO TENDER SYSTEM.

The reports of the commissioner of public works of New Brunswick, which you handed me, do not contain definite information as to the cost of the superstructures which I have measured, except in the case of Lefebvre's,

Campbell's and Blackville, which are as follows, as given on page 23 of commissioner's annual report of 1897:

Lefebvre—Substructure, \$7,887; superstructure, \$15,350; sundry inspection, etc., \$735.45; total, \$23,972.45.

Campbell's — Superstructure, \$10,400; sundry inspection, etc., \$370.08; total, for super-structure, \$10,770.08.

Blackville — Substructure, \$5,053.95; superstructure, \$10,459.22; sundry inspection, etc., \$336.82; total \$15,849.99. THE DEADLY COMPARISON.

The papers you forwarded me bearing upon this subject show that the chief commissioner admitted in the legislature last session that the prices paid to the Record Foundry Co. and to Ruddick of Chatham were at the rate of 6 1-2c. per lb. This would appear to be corroborated by my calculations, as will be seen by the following:

The aggregate weight of these three bridges, Lefebvre, Campbell's and Elackville, is 562,388 lbs. The aggregate cost of these as given in the chief commissioner's report is \$36,209.22, showing the cost to have been 6.44c. per lb., taking my weights as a basis.

To enable you to make a comparison of the price per lb. paid by the respective governments of Nova Scotla and New Brunswick, I submit the following:

The aggregate weight of five bridges in Nova Scotia, above mentioned, is 288,266 lbs., The aggregate cost is \$19,-165, equal to 3.52c, per lb. One half of the above were built upwards of five years ago, when the price of bridge material was 25 per cent. higher than last year.

I would especially call your attention to the fact that the above price of 3.52c. per lb., is not f. o. b. cars at the contractor's works, but delivered, erected, floored and painted complete.

This would show that Nova Scotia bridges are purchased at a price of 2 77-100c. per lb., as compared with 6 1-2c, per lb. paid by the New Brunswick government.

'The bridges in each province are very similar in general design and character, and the steel chiefly used in both provinces during the past two years is of the "Carnegie" brand.

## MORE IN DETAIL.

To make a further comparison of the cost of different spans in the respective provinces, I would refer you to the following:

In June, 1837, the Nova Scotia government received tenders for Ritcey Cove bridge (See Prov. Eng. Report, 1898), 1 span 160 feet, roadway 16 feet Three tenders were received and the contract awarded to W. P. McNeil, New Glasgow, at \$2,200. This ir cluded delivery, erection, flooring and painting complete. As against this, a contract for a span of 150 feet, ten feet less 'han the N. S. span, was let at about the same time to the Record Foundry and Machine Co. of Moncton at a price stated to have been 6 1-2c. per 1b. delivered f. o. h. cars at the contractor's works. The estimated weight of the bridge in question, as given above, is 72,275 lbs., and the total cost of the superstructure erected complete and painted, would be \$5,239.93, or more than 100 per cent. about the amount paid for a span 10 feet less, in Nova Scotia. Again, in March, 1897, the N. S. government received tenders for Red bridge (See Prov. Eng. Report, 1898), span 80 feet roadway 15 feet. Contract awarded to W. P. McNeil, New Glasgow, for \$717, delivered, erected, floored and painted complete. In the same year the N. B. government erected two spans 80 feet, roadway 16 feet 6 inches, at Blackville. The estimated weight of each is 27,212 lbs.; this, supplied at Contractor Ruddick's works at Chatham, is stated to have cost 6 1-2c. per lb.; adding 3-4c. per lb. for delivery, erection, flooring and painting complete, the total cost would amount to \$1,972.87.

By reference to the sheets of detail weights it will be seen that in Nova Scotta an 80 foot span, with roadway 18 fe t wide, is 26,739 lbs., as against 27,212 lbs. for span of same length in New Brunswick.

# STILL ANOTHER TEST.

As another comparison, I may cite the case of the Petitcodiac bridge in New Brunswick. Span 110 feet, estimated weight 36,381 lbs., at 7 1-4c. per lb., delivered, erected, floored and painted complete, amounts to \$2,637.62, as against similar span in Nova Scotia 10 feet longer, estimated weight 39,047 lbs., built by contract, delivered, erected, floored and painted complete for the sum of \$1,190.

An examination of the tenders received by the Nova Scotia government for the past four years, for the superstructure supplied in that province, will, I have no doubt, convince you that if 6 1-2c, per lb., delivered

f. o b. cars at contractor's works, is correct, the New Brunswick government are paying at least 100 per cent, more than the market price.

#### LESS THAN THREE CENTS.

As further and conclusive evidence on the subject of the market price of superstructures, I enclose herewith a communication from the Dominion Bridge Co., in response to an enquiry (a copy of which is attached). It will be seen that the company, during the past two years, has tendered for 17 spans in Nova Scotia, at prices varying from 2 62-100c. to 2 84-100c. per lb., delivered f. o. b. cars at their works.

The freight, erection, flooring and everything complete, as per figures given, you will find, bring their prices up to an average of 3 1-4c, per lb. EVEN THEN NOT THE LOWEST.

If you examine the tenders received by the N. S. government for the past two or three years, you will also observe that the Dominion Bridge Co. has been outbid by local bridge builders in almost every case. When measuring the superstructure, I also made measurements of the piers and abutments, and enclose herewith a statement of the details.

It was, of course, impossible for me to get exact dimensions in every case. I made enquiries, however, of persons in the vicinity, who were present when the masonry was being built, and I think it will be found that my neasurements agree in the main with those shown on the plans from which the work was actually constructed.

I enclose herewith my note-book, in which you will find all the measurements recorded, with sketches showing the general design and details of various members of which I have estimated the weight, etc.

Yours respectfully,

A. R. HOLMES, C. E. J. D. Hazen, Esq., Barrister, etc., St. John, N. B.

# AGREES WITH EMMERSON'S TESTIMONY.

From this report it will be seen that whether the comparison is made by the length of the span, or by the weight of the material, it is shown that the bridges let by tender are furnished for less than half the price paid to the Record Company. But it did not require a measurement of the

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n of e rebridges to prove that the government has been paying more than six cents per pound for them. In the public accounts committee last session accounts were examined of the superstructure of Saunders Brook and Dingee bridges. The following are copies:

Saunders Brook bridge — Record Foundry Company's account, 3,5% rounds at 6 1-2 cents, \$233.09.

Dingee Bridge—Record Foundry Company's account, 12,586 pounds, at 6 1-2c., \$816.09.

As the province was charged in the public accounts with \$448.41 for the Saunders bridge and \$1,186.17 for the Dingee bridge, Mr. Pinder and Mr. Dibblee askel what had become of the balance above what was paid the Record Company, Mr. Emmerson stated that the balance represented freight from Moncton and the cost of crection, flooring, painting, etc.

The committee could get no accounts for the other bridges, simply the Record Company's receipts. They asked for particulars and were told that there were no details, but that the bridges were all the same price, namely, 6 1-2 cents per pound. The 6 1-2 cent price for the bridges delivered on cars at Moncton is thus established by the engineer's report and the testimony of the chief commissioner. These two bridges will be discussed later. Mr. Emmerson's statement is given here as official evidence of the 6 1-2 cent price. Mr. Holmes mentions a letter from the Dominion Bridge Company, of Montreal, in reply to an enquiry for their prices. The manager of the Dominion Bridge Company writes as follows:

THREE CENTS IS MORE THAN ENOUGH.

Dear Sir: -

We have duly received your favor of the 11th inst., and in reply thereto would say that we shall be pleased to furnish you with manufactured metal work for highway bridges at prices varying from 2.65 cts per pound to 3c per pound, f. o. b. cars at our works. These prices are for the metal

work fully manufactured and fitted ready for erection at sites, and cover painting one coat before shipment. The exact price we can quote you for any particular structure will depend on the design of the span, and on its length and capacity and resulting weight, the shorter and lighter span being the more expensive, the longer and heavier spans the cheaper; but our price is not in any case likely to be below or over the figures named above. If you will send us full particulars of any work that may be offering, we will make a careful estimate of the same, and will name you a definite price for the metal work.

Freight rates from our works to the various I. C. Ry points are as follows: Campbellton, 210.; Newcastle, 25a.; Moncton, 27c.; Amherst, 27c.; Truro, Halifax, and New Glasgow, 28c.; Antigonish 30c.; and Sydney, C. B., 32c.

The various items of erection expense will vary a great deal with the locations. carriage from railway station to site may be taken at 25c. per ton per mile. Lumber for flooring is obtained locally at prevailing prices. The cost of labor for the erection, including setting the false work, assembling and riveting the metal work, laying the flooring and painting the metal work after asembling, may be figured roughly at 70c. per 100 lbs. for the shorter and lighter spans, and 50c. per 100 lbs. for the longer and heavier spans, or say from \$1.50 to \$3.00 per lineal foot of bridge.

# NOVA SCOTIA TENDERS.

Re Nova Scotia work. We have tendered to the Nova Scotia government since the first of the year on seventeen different bridges, and on referring to our records find that we have estimated this work at prices varying from \$2.62 to \$2.84 per 100 lbs. of metal work, on cars at our shors. The tenders were lump sum prices for completed bridges, and were reached by adding to the above prices for metal work, the cost of freight to the nearest railway station, and a lump sum which had in each case been named us by the erector who does our lower province work, as the price at which he would contract to take the metal work from the cars, transport it to the site, and do all the work connected with the erection of the bridge. His price also covered furnishing and laying the wooden flooring.

Re the value of bridge work for the

least few years, there has been but little change for some time. The metal market is now perhaps 10c, per 100 lbs. higher than a fair average for 1897, and just about the same as in 1896.

Steel has practically superseded from in bridge work, and is now a good bit cheaper. Some iron pars are still used for adjustable rods, but iron of suitable quality for bridge work now costs say 20c. per 100 lbs. more than steel. Iron bridge plates and shapes are no longer generally made, and can hardly be obtained.

Yours truly, .

DOMINION BRIDGE CO., LTD., By PHELPS JOHNSON, Manager.

## LESS THAN THREE CENTS.

This letter shows that while Mr. Emmerson has been paying \$6.50 per hundred pounds for New Brunswick bridges at the contractor's works, the highest price named by the Dominion Bridge Company was \$2.84 per hundred pounds.

But even at the price quoted the Dominion Bridge Company has not been able to hold the business in Nova Scotia against the competition of local firms.

In 1894 seven contracts for steel bridges were made in Nova Scotia.

All were put up to tender and the competition was close. Notwithstanding its low price the Dominion Bridge Company got only three bridges.

In 1895 the Dominion Company got five bridges and the Canadian Bridge Company six out of twenty-six Nova Scotia bridges. In 14 cases a New Clasgow firm was the lowest tenderer. Instead of bargaining privately for double the Montreal Company's price the local builders went into competition and under-bit the upper province concerns.

In 1896 the Montreal firm bid on 22 bridges, but the Nova Scotia builders were below them in nearly every case, and somotimes 20 per cent, below. It was in this year that Mr. McNeill, of New Glasgow, took the Ritcey Covebridge at \$2,200. The Dominion Bridge Company's tender of \$3,084 was of course rejected. For a bridge ten feet shorter this province paid, computing at the 6 1-2 cent rate, \$5,239.93.

# THE AMOUNT OF THE STEAL.

The following table gives a clear view of the amount of the steal in the case of the only three bridges of which the cost of superstructure is given in the public accounts:

Name.	Span.	ft.	Weight, lbs.	Market Price.	Emmersor	Price. Loss.
Lefebvre	(2)	200	237,328	\$7,119 84	\$15,350	\$8,231 00
Blackville	(3)	1-200 }	173,328	5,192 64	10,459	5,366 36
Campbells		2-80 }	151,972	4,559 16	10,400	5,840 84
Totals			562,388	\$16,871 64	\$36,209	\$19,438 10

When have given the market price at three and a half cents per pound, which is five per cent, above the highest quoted price of the Dominion Eridge Company, while the actual Nova Scotia cost was at least ten per cent, below the Dominion Bridge Company's lowest prices.

#### COMPARED WITH THEMSELVES.

Let us now compare the government's prices under the private bargain system with the prices under the tender system. The sworn evidence of the builder of the Drummond County Railway bridges, given in the parliamentary investigation last year, was that the price of steel railway bridges had fallen 1 1-12 cents per pound since 1893. But in this province the movement has been the other way. The price has increused. So far as can be ascertained no bridge has been furnished by the private pargain system

at a lower price than 6 1-2 cents per pound. But so long ago as 1892, when the current price of bridges was some forty per cent higher than it was in 1897 the Woodstock bridge was supplied at about four cents per pound.

That bridge comprises 1 span of 22,050 pounds; 1 of 139,240 pounds; nine of 37,393 pounds each, and one of 37,560 pounds—total weight 1,088,534. The price paid for the superstructure was \$42,000, or 3.86c. per pound.

Let us compare this price with the sums paid for three private contract bridges built in 1897. The aggregate weight of the Lefebvre, Campbell's and Blackville bridges is 562,388 rounds. This is a fraction more than half the weight of the Woodstock bridge. On the basis of prices paid last year the Woodstock bridge would have cost over \$70,000 instead of \$42,000, which was paid at a time when the market prices were one third higher.

We may also compare the Blackville bridge, built by the Record Company by private contract, with three smaller bridges built six years ago by tender and contract. The Blackville bridge weighs 173,088 pounds and cost \$11,25?.-72. The Salisbury bridge weighs 75,-000 pounds and cost \$3,600. Trout Creek bridge weighs 51,500 pounds and cost \$2,730. The St. George bridge weighs 50,000 pounds and cost \$2,470. The three bridges built under competition weigh 176,500 honest rounds, or 3,412 pounds more than the Blackville bridge. These three bridges built six years ago, when the prices were much higher, cost \$8,800, or \$2,450.72 less than was paid for the single Blackville bridge.

So it appears that whether comparison is made with larger or smaller bridges Mr. Emmerson has pushed up the price when every other parchaser has been pushing it down.

ALL TWO PRICE STRUCTURES.
'These are two price structures:

The Blackville Bridge. The Lefebvre Eridge. The Campbell Bridge.

As shown above the excess of price in these three structures is over \$18,-000.

Then there are other bridges of which the government has not furnished a return of the price paid. Among these are:

Bathurst bridge, weight lbs	210,000
Tabor's	72,000
Cuissack's	75,000
Hutcheson	48,000
Buil Creek	9,600

Total.. ...... 414,600

Assuming an excess of price proportionate to that on the three bridges of which the cost is given, there is in these five a further gratuity to the builders of more than \$13,000. But as will now be shown, two prices is by no means the rule. It is probable that in the case of some of these last mentioned structures three or four times the market prices were paid, as in the cases following:

# A THREE PRICE BRIDGE.

The steel bridge at Petitcodiac is a single span of 110 feet. It was built in 1895 and 1896 by Mr. Willard Kitchen. Mr. Blair was then premier of the province, and he had the same regard for the Kitchen firm that Mr. Emmerson has for the Record Company. The department went through the form of asking for tenders for the substructure of the Petitcodiac bridge.

In response the following tenders were received:

(See return brought down 1897).

(bee letain blought down lowly.
Amount Tandars. substructure.
J. A. Killam, present site, \$2,689.37 Joseph McBay, present site, 3,895.25 J. B. McManus, present site, 2,000.00 J B. McManus, new site, 1,869.25 Fred P. Reid, new site, 3,170.50
E. A. Bleakney, present site, 2,292.00 E. A. Bleakney, new site,1,987.00 Willard Kitchen, sub and super-
structure, 6,474.60
G. O. Dunham, present site,2,725.00 G. O. Dunham, new site, 2,550.00
James E. Simonds, new site, 2,795.00

w.	Brewer,	new	site	1,800.00
Reb	ert A. Sn	ith. J	W. Steev	es.

#### HOW THE GAME WAS WORKED.

It will be observed that while ten contractors made offers for the substructure alone, as they were asked to do, Mr. Kitchen put in an offer for both sub-structure and superstructure, which was not asked for. Of course many contractors would have tendered for the whole work if they could have had the chance, but they would have given the province a one-price bridge and that was not government policy. Accordingly Mr. Kitchen got the job at his own price and without competition.

Deducting the lowest tender for the sub-structure, which was \$1,800.00. from the tender price of \$6,474.00, Mr. Kitchen's contract gave him \$4,674.00 for the steel work of a single 110 foot span. It can easily be shown that this is more than three prices.

#### THE PROOF.

As Mr. Emmerson has an objection to nameless engineers, it may be stated here that this bridge was measured by engineer George McCarthy. Mr. McCarthy was on the engineering staff of the Intercolonial Railway some years ago. He has since taken a full course at McGill University, obtaining his degree with high honors and winning no less than eleven prizes. Later he was engaged from time to time with the C. P. R., and is now employed on the staff of the Montreal Harbor works. He was recently elected an associate member of the Canadian soclety of civil engineers. Mr. McCarthy measured the Petitcodiac bridge and computes the weight at 40,302 pounds.

This gives 11 4-10 cents per pound as Mr. Kitchen's price for a bridge which any contractor would have built in that year for one third of the price.

#### AND EXTRAS BESIDES.

In	1895	 	\$1,808.28
Ιn	1896	 	5,202.20
In	1897	 	62.00

If it is objected that the lowest substructure tender was too low, and that the work was worth much more, it can be shown that not more than \$200.00 at the most should be deducted on that account. For as a matter of fact Mr. Kitchen sub-let the superstructure to J. B. McManus at his tender price of \$2,000, and this part of the work was done without a cent of extras.

Mr. Kitchen therefore got \$4,474 and several hundreds of extras for a steel structure which he could easily have sub-let at one third of the figure.

# SHOWN BY COMPARISON.

For the Petitocdiac bridge Mr. Kitchen got, after paying for the substructure \$4,474—and extras. It is a 110 foot bridge.

In the same year a steel bridge of 112 feet, but one foot narrower, was built in Colchester County, Nova Scotia for \$1,498, without extras, a longer bridge for less than one third of the price received by Mr. Kitchen.

In 1894 Stewart, of New Glasgow, built a 112 foot bridge at Weirs, in East Hants, for \$1,500, without extras, also less than one third of price of Mr. Kitchen's 119 foot bridge.

The same year the same contractor furnished a 120 foot bridge for \$1,561.

## A SIGNIFICANT DATE.

It is interesting to note that the contract for the Petitcodiac bridge was signed September 3rd, 1895. The dissolution of the house took place shortly after and the election was held October 16th. The contract to be mentioned next, which is a four price

contrast, bears the same date.

THE PORT ELGIN BRIDGE A

FOUR PRICE CONTRACT.

The Port Elgin bridge is an 83 foot span. It was built in 1895 and 1896. The tenlers were called for as in the case of the Petitcodiac bridge and the scheme was worked in the same way. The call for tenders was for the sub-structure only. All the other contractors, except Mr. Willard Kitchen, jut in their tenders in accordance with the requirements of the commissioner's advertisement. Mr. Kitchen alone tendered for sub-structure and superstructure together. No doubt this was the result of a private understanding, in accord with which Mr. Kitchen got the contract at his own price without competition. Following tenders were received: (See return trought down in 1897).

J B. McManus	\$2,950
Smith & Steeves,	2,992
W. Brewer,	1,970
E. A. Bleakney,	2,000
Willard Kitchen, for sub and	
superstructure	5.497

Deducting the amount of the lowest tender, \$1,970, for the sub-structure, Mr. Kitchen's price for the steel bridge was \$3,527. This bridge was measured by Mr. McCarthy, who computes the weight at 25,440 pounds, without the side-walk, which seems to have been part of the excuse for an enormous bill of extras. Mr. Kitchen's contract, after allowing the tender price for the substructure, gave him the remarkable rate of 13 4-5c. per pound.

This is more than three prices, but it is not nearly all that was paid.

	The	tollo vi	ng amou	nts	are	charge
ir	1he	public	accounts	to	this	bridge:
I	n 189	5				\$1,150.51
I	n 189	6				6,572.48
1	n 189	7				204.80

This is \$2,430.79 over the tender price, and the only extra work was the construction of the side-walk and a dry wall to carry it. Mr. McCarthy

Total..... \$7,927.79

measured the foundation work for this bridge as well as the superstructure, and gives the following measurements, including the side walk and sub-structure to carry it. The prices are ordinary contractors' rates:

## Substructure.

Masonry in cement, 92 yards

at \$8.00 \$736.00
Masonry, dry stone, hand laid,
235 yards at \$3.50 825.50
Earth and stone filling in ap-
proaches, 560 yds, at 30 cents 168.00
Square timber in foundations,
6,330 feet B. M., \$15.00 94.95
54 piles under cement mason-
ry, each 25 ft long, 1350 lineal
feet, 6 cents, 81.00
<del></del>
Total estimate cost of sub-
£iructure \$1,905.45
26,579 pound, say at 3 3-4 cents
per pound, complete, erected,
floored, painted one coat—
26,579 pounds 996.71
Total estimate cost of sub, and
superstructure complete, 2,912.16
To this amount it might be fair

\$3,203.37

to add 10 per cent, to cover engineering and inspection. 291.21

Excess price over what it should have cost......\$4,724.22

It will be seen that Mr. Kitchen got two and a half prices for the whole structure. The value of the substructure, as made up from the engineer, at \$1,905.45 agrees very closely with the lowest tender of \$1,970. But if we increase it by 46 per cent. to \$2,927, we have still left \$5,000 as the price received by Mr. Kitchen for the \$3 foot span with the side walk added. Now the total weight, including the sidewalk is 26,579 pounds, so that the price paid was 19 cents per pound, or nore than four prices.

# COMPARED WITH HON. MR. RYAN'S CONTRACTS.

Allowing the tender price for the substructure, Mr. Emmerson paid Mr. Kitchen for the Port Elgin superstructure over \$6,000. It is an \$3 feet span'.

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The Sussex (Trout Creek) bridge comprises two spans, each 97 feet. The weight of the Sussex bridge is almost double that of the Port Eigin bridge, with sidewalk; one weighing 51,500 pounds, and the other 26,579 pounds. Would it be believed that Mr. Kitchen, allowing tender price for the substructure, got \$6,000 for the smaller bridge while Mr. Ryan paid the Dominion Bridge Company \$2,730 for the larger one?

# ANOTHER COMPARISON.

Compare the Port Elgin price with the market price, Mr. Kitchen receives (allowing him 46 per cent. over the market price for substructure) \$5,000 for an 83-foot span.

In the same year "Simon's" Bridge, Digby, about the same length, was furnished by the Canadian Bridge Co. for \$956.

In 1896 a 90-foot span was furnished by the Duminion Bridge Company for James River, Antigonish, at \$1,030.

In 1836 the same company built a bridge of 80 feet span, but with two feet narrower roadway in Guysboro for \$882.

In 1895, the same year that Kitchen got his control, the Dominion Bridge Company built the Bashure bridge in Inverness County, comprising two spans, one of 80 feet and one of 100 feet for \$2,066 or less than half the sum paid to Mr. Kitchen for one span of 83 feet.

# THE DATE AGAIN.

In view of this extraordinary contract and of the enormous bill of extras that followed, it may be necessary to repeat one word of explanation.

The contract was made September 3rd, 1895, just before the dissolution of the house, and six weeks before the election. The campaign of 1895 was not carried on without funds, but the people can judge for 'hemseives how the money was provided, and who footed the bills in the end.

# A THREE AND A HALF PRICE BRIDGE.

The Saunders Brook Bridge, in Queens County, is a single span of 20 feet. It is not even a trussed bridge.

It consists merely of four rolled beams used as stringers, held together by four lines of angle bracing riveted at the intersections.

There is, in addition a flat plate under the ends of the girders. This simple structure was practically bought ready made by the Record Company. The beams were imported cut in lengths and rolled in shape in Pennsylvania.

The work lone in the construction shops may have cost \$25, but that is a high price. It was necessary to bore 22 holes, which cost about 10 cents each and to provide 14 rivets. The weight of this bridge is as follows:

Beams	3	 	 		3,008
Angle	braces	 	 		222
Flait	plate		 		380
				_	

Total..... 3,602

The Chief Commissioner's report shows that this superstructure cost \$448.41 completed, erected and painted. Mr. Emmecson explained that the price paid at the shipper's shops was 6 1-2 cents per pound. The rest was paid for freight, erection, flooring, etc. It is a three and a half price bridge. In Nova Scotia a similar bridge would no doubt be provided, ready for use at 3 1-2 cents per pound. This bridge cost 12 1-2 cents per pound.

In, the same year the local builders of Nova Scotia were providing 60 feet spans, completed, floored and painted for less money than was paid for this exceedingly simple 20 feet span. For instance, Mr. Emmerson's 20 feet span cost \$448.90. In 1897 a 60 foot span was furnished in Nova Scotia for \$413, and last year a 60 foot span was built and completed at Hopewell, Pictou County, for \$347.00.

# ONLY TWO PRICES.

The Dingee bridge, also in Queens County, is a single 60 foot span. The weight of this bridge, as given by the Chief Commissioner himself in a return brought down from last year is 12,586 pounds. The amount charged for the superstructure (see Commissloner's Report) was \$1,186.17, or 92-5 cents per pound. Mr. Emmerson stated that 6 1-2 cents per pound was rald for the orlige at the Record works. The remainder was the bill for transportation and completion. The bridge should have cost less than half the money. In the same year the Nova Scotia government placed a 60 foot bridge at Bayfield, Antigonish, for \$548.00, and one at Sunny Brae for \$560.00, each of them for less than half the cost of a bridge the same length in this province.

# THREE PRICES IN RESTIGOUCHE

The Mill Cove bridge, Restigouche Counay is a 60 foot span. The completed weight is 9,114 pounds. It was given out by private contract to J. M. Ruddock, of Chatham, who was paid \$1,280, or a little more than 14 cents per pound. The work was done in 1896. In that year the Nova Scotla government procured from local builders, as stated above, two spans of the same length at \$550.00 each and one at \$548.00, including transportation, flooring, erection, painting and all other charges. In 1897 the Nova Scotia price for 60 feet spans was as low as \$415.00, and in 1898 one was furnished at \$347.00.

The Mill Cove bridge appears to have cost so nething above Mr. Ruddock's \$1,230.00. There is a separate charge which is not included in this computation. But without that it is very nearly a three price bridge.

#### THREE PRICES IN GRAND MANAN

The Grand Manan bridge was built in 1895. It is a 52 feet span with a 15 feet roadway. The public accounts make the cost \$1,658.11. Of this \$427.00 appears to have been paid for the substructure, which comprises 64 yards of cement masonry. Other amounts of \$995.54 and \$237.57 were paid, presumably for the steel work. The bridge weighs 9,333 pounds, and therefore cost 13 1-5 cents per pound. Allowing something extra for transportation, 4 to 4 1-2 cents would be a fair price for this bridge.

# COMPARISON AGAIN.

In the same year 50 feet spans were built in Nova Scotia at the following prices

Some of these structures required more expensive transportation than the Grand Manan bridge, which cost three times the price.

# THE HALF IS NOT TOLD.

The foregoing account covers ail the bridges of which the facts could be

learned. Not a bridge among them cost less than two prices, while some cost three and four times the market value.

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It is reasonable to suppose that the cases where the prices are not to be got out of the public accounts are fully as bad.

The details of expenditure for 1898 are not available, and no one is permitted to know the particulars of contracts for bridges under construction, or not yet commenced.

#### THE DEFENCE.

What has Mr. Emmerson to say in reply to the charge that he pays two prices for work? He says that the bridges were measured by "a nameless engineer." That would be no answer if the measurements were right, and Mr. Emmerson has not disputed them. But now he has the names of the engineers, and he cannot say a word against either of them. Then he says that he wanted the work done in the province.

Mr. Emmerson well knows that he could have it done in this province for one price. His own family are shareholders in the Record Company, and he must know that the concern competes with outside firms in other kinds of work.

They could compete as well in bridges if Mr. Emmerson did not relieve them of the necessity.

The government of Nova Scotia also prefers to have the bridge work done at home. The Nova Scotia bridges are now practically all built at New Glasgow by two contractors, whose business has grown up from small beginnings under the one price competition system. Nova Scotia gets two bridges or more for the price that Mr. Emmerson pays for one. In both cases the work is done at home. But the Nova Scotia workmen get twice as much work, and the people get twice as many bridges for the same money.

# THE QUALITY OF THE WORK.

Speaking at Hartland, Saint Andrews, Militown and Fredericton, Mr. Emmerson did not deny that he was paying 61-2 cents per round for bridges. But he declared that he was getting better bridges than were supplied under tender and contract. He asserted that previous contractors had built bridges from their own plans, and had not carried out the terms of their contract, and declared that the Nova Scotia gov-

ernment bridges would not last more than 25 years.

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In making these statements Mr. Emmerson reflects on his predecessor, Hon. Mr. Ryan, who accepted and commended the bridges built in his time by tender and contract. He condemns his own engineers and inspectors who were satisfied with the work. He condemns himself for taking tender and contract bridges off the hands of the contractor as satisfactory. He contradicts statements made by provincial ministers in the house and the country. Moreover when he declares that the tender and contract bridges were all built on the plans furnished by the contractors he makes a statement contradicted by at least one of the bridge builders.

# MR, EMMERSON CONTRADICTED.

After Mr. Emmerson had made his speech in Hartland, referring to the tender and contract bridges, an enquiry was addressed to the Dominion Bridge Company, which furnished some of the bridges built in this province before the two price system was introduced.

The Dominion Bridge Company was asked whether it was true that they built bridges according to their own plans and specifications, and whether it was true that they did not do the work to the satisfaction of the government. The manager of the Dominion Bridge Company replies as follows:

## THE BRIDGE COMPANY'S STATE-MENT.

Dear Sir,-Your letter of Sept. 29th and copy of Sun, issue of Sept. 28th. have been duly received. I note with much surprise Mr. Emmerson's reported remarks about upper province bridge builders, and have to say that so far as this company is concerned there is no foundation whatever for his statement that the bridges built for the province have not been fully in accordance with the plans and specifications of the contracts. We have built for the province only three bridges-Salisbury bridge, contract dated Aug. 8, 1892, signed by P. G. Ryan, chief commissioner; Trout Creek bridge, contract dated Aug. 12, 1892, signed by P. G. Ryan, chief commissioner; and St. George bridge, contract dated Sept. 1, 1893, signed by H. R. Emmerson, chief commissioner. The writer does not recall any unfavorable criticism ir. connection with either of these

correspondence with Mr. Emmerson in cur files and finds no reference to any faulty construction of St. George bridge, the only structure we have built for the province under his supervision. This bridge was erected in December, when the field painting could not be done, and it was in this respect only completed the following summer.

#### NO CAUSE FOR DISSATISFACTION

The two earlier bridges were built to our own plans, prepared in accordance with specifications issued by the chief commissioner; for the St. George bridge the chief commissioner furnished both plans and full specifications, which were made the basis for tender and contract, and had the briege not been fully in accordance therewith, it should not have been accepted or paid for. We are not aware that Mr. Emmerson has the siightest cause for dissatisfaction with this company or its work done for the province, and supposed the only reason we have not been allowed to tender the past four years to be that it was the settled policy of the government to have its bridges manufactured within the province, regardless of

> Yours very truly PHELPS JOHNSON, Manager Dominion Bridge Co'y, Ltd.

# WHAT THIS LETTER PROVES.

It proves that Mr. Emmerson accepted the tender and contract bridges as satisfactory. It also proves that Mr. Emmerson himself furnished plans and specifications for the last tender and contract bridge. The understanding of the Dominion Bridge Co. manager that he was not allowed to tender for more bridges because of the determination of the government to have the work done at home irrespective of cost is partly correct. The government's determination was evidently to have the work done by particular persons at home irrespective of cost. Not only was the work confined to this province, but to special individuals in this The competition has never province. been thrown open even in New Brunswick. If it had been the two price system would soon have disappeared. The bridge builders whom Mr. Emmerson condemn are bridge builders They for the Intercoloniai railway. works, and has today examined all built the bridges for the Drummend

Counties railway, now a part of the Intercolonial. Mr. Biair, the minister of railways, has highly commonded their work. They are building for most of the railways and municipalities in Canada. Mr. Emmerson alone has discovered that they cannot do good bridge work.

# THE NOVA SCOTIA BRIDGES.

The Nova Scotia bridge policy was adopted under the premiership of Mr. Fielding, now finance minister. His administration appropriated during the <sup>13</sup> years following 1883 about one an a half million dollars for permanent bridges. Mr Fielding declared that these bridges were first class in every respect. The Nova Scotia provincial engineer, Mr. Murphy, is supposed to be a great authority on steel bridges.

Before going to Nova Scotia he was resident engineer of an Irish railway, and had served on the engineering staff in the construction of many great bridges in Great Britain. Morgan's Men of the Times says that 'his plans, specifications and methods for concrete sub-structures drecting highway for bridges are known and are gaining favor all the American continent. over He has been consuited by the Newfoundland government respecting railways, by the government of New Brunswick on bridge construction and by the government of Bermuda respecting harbor works."

## EMMERSON'S USELESS REPORTS.

Mr. Murphy's public works report differs much from Mr. Emmerson's. The New Brunswick report does not give the names of contractors nor the amount of their contract, nor any information about tenders. It is in fact absolutely without value as a means of learning how the public business is done. The Nova Scotia book gives all the necessary facts. The length, width and general character of the bridge; the date of the call for tenders, the names of the persons tendering, the amount of their tenders, the tender accepted, the date of the contract and the contract price, and the amount finally paid are all given in a tabulated form. Mr. Murphy also prints the general form of contracts and specifications, which show that he demands a thorough structure.

Mr. Fielding has always declared that the Nova Scotia bridges were in every respect first class, and Mr. Emmerson's statement that they are only good for 25 years is the first charge that has been made against them.

They have in Nova Scotia a strong, well informed and aggressive opposition, which has attacked and criticised wherever these was opportunity. But they have not been able to find fault with Mr. Murphy's bridges.

The New Brunswick department has recognized Mr. Murphy's merit and ability by seeking his advice in bridge matters.

#### WHAT MR. MURPHY SAYS.

After Mr. Emmerson had made the statement that the Nova Scotia bridges would not last more than 25 years, the Nova Scotia chief engineer was seen at Halifax by a representative of the press. He was asked whether, the statement was true. Mr. Murphy replied:

"I don't care to say anything about "New Brunswick bridges, nor to compare them with ours, but you may "quote me as saying the Nova Scotia bridges are good for one hundred years, and more if looked after. Our "wooden bridges will live 25 years."

# COST AT THE WORKS.

As mentioned above, Mr. Emmerson admitted last year that he paid the Record Company 6 1-2 cents per pound for bridges at the company works.

As compared with this, it is interesting to note the following:

The Dominion Bridge Company, so long ago as 1892 received for the Salisbury and Trout Creek bridges a price which netted less than 3 3-4 cents at their works. In 1893 they received for the St. George bridge a price which allowed them less than 3 1-4 cents at the works.

To-day the Dominion Bridge Company offer to furnish bridges at 2 2-3 to 3 cents.

W. P. McNeill & Co., of New Glasgow, offer to furnish light bridges at prices never experimg three cents at the works and heavier bridges at lower rates.

Stewart, of New Glasgow, had a few weeks ago contracts for nine spans for Nova Scotia all based on prices lower than three cents per pound.

Railway bri-Le contracts were made last year at prices lower than 2 2-5 cents per pound. Bridges have been built in Maine at two cents per pound, which, with duty added, would be equal to 2 1-5 cents in this province. It is reasonable that this should be so,

as the material is imported rolled and cut into shape and costs delivered at the bridge works from \$1.25 to \$1.50 per cwt.

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# SUBSTRUCTURES.

The foregoing relates mainly to superstructures. It is more difficult to get details in respect to substructures, but from all the facts available, it appears that the same system of favoritism and excessive prices has prevailed. It is a rule, but not a constant one, to call for tenders. After the favorite has got the lowest tender specifications are frequently changed so as to make a new and very profitable contract out of it. An interview with James Reid, of Dorchester, shows how the plan worked in the Lefebvre bridge contract.

It may be said that Mr. Reid is one of the most prominent contractors end builders in this part of the country, and has handled large contracts in Manitoba, Newfoundland, Nova Scotia and this province.

#### A CONTRACTOR'S EXPERIENCE.

Have you frequently tendered for New Brunswick government work?

Yes, until I came to the conclusion that it was usaless to do so.

Have you secured any contracts from the N. B. government?

None whatever.

How do you account for this?

The word always was that I was too high, but I cannot explain it. I always figured as low as possible to do the work in accordance with the plans and specifications submitted to me, and I have always been able to get my share of work, tendering in competition in other quarters.

Did you tender for the substructure of Lefebvre bridge?

Yes; I put in a tender.

Was it advertised by public tender? Not in the newspapers that I know of. I saw the advertisement on the wall of Mr. Emmerson's office.

Where were plans and specifications

They were in Mr. Emmerson's office. You did not get the contract?

No.

Who gct it ?

Willard Kitchen of Fredericton. His figures were said to be lower than mine.

Was the work carried out in accordance with the plans on which your tender was based?

No.

Will you describe briefly the changes nade in plans and specifications?

# THE CHANGES

The plans called for a centre pier of stone masonry, with concrete foundation carried down to bed rock, which is six feet below the bed as shown by the soundings. Concrete if properly prepared as the original plans called for, would cost about, or nearly, as much as stone. It would also he a very difficult piece of work at the place in question; in fact, the most difficult and uncertain part of the pier. and a caisson or coffer dam would be required to put in foundation. This would entail special pumping to keep the water out. I tendered to do the work as called for by the plans and specifications. I have learned, however, that no concrete foundation was put down at all. The pier was founded on tiers of squared hardwood timber bolted together. This timber foundation was not carried down to bed rock, as the bottom of it can be plainly seen stuck above water at low tide. This wooden foundation was built on shore and floated into position.

Was any change made in the size of the pier as called for by the original

plan?

Yes; the dimensions of the pier were materially reduced and this would reduce the quantity of masonry and consequently the cost.

A CHEAPER JOB.

Did the change of plans materially diminish the cost?

Most assuredly, but I could not make an estimate off hand. It might cost \$2,000; in fact, in making my tender I considered the concrete foundation a very important item.

You know that Mr. Kitchen does a large amount of work for the local covernment?

Yes, he is reported to have got many contracts.

The substructure of the Lefebyre bridge as thus changed, cost \$7,887.

## NO COMPETITION.

Mr. Kitchen also had the contract for the substructure of the Bathurst bridge Concerning this work Mr. Reid was asked whether it was advertised publicly.

Not that I know of. It is my business to keep the run of work of this class, but I knew nothing about this bridge being up to tender until I saw it stated that Mr. Kitchen had the contract. I presume it was advertised in the same way as the Lefebvre bridge, by putting up notice in the chief commissioner's office.

# A DISCOVERY THAT COST MONEY.

The superstructure of the Mill Cove bridge is mentioned above. But thereby hangs another tale. This bridge was put up to tender. The lowest offer for the whole structure was \$6,600. The plan then was to clear away the old cribs and put in a long steel trestle. The contract was, however, divided into two and let at \$6,737, an advance of \$137 above the lowest tender. But tefore the work began the government discovered that the cribs were filled with stone and could be used again. Here was a chance to save money. So the contracts were cancelled and new ones made to utilize the foundation. The result of this piece of economy may be learned from the public accounts. The bridge when completed cost the province \$7,690.76. The happy discovery of material seems to have cost the province \$952.

### ANOTHER SAMPLE.

A contract for superstructure was let in North imberland county. The favorite tenderer was so fortunate as to bid lower than the competitors. But he was not allowed to suffer. If he bid low, he also built low. The iders are said to be several feet lower than the contract required. Other contractors bid for the work as specified. They could not compete with a man who built as he liked.

#### THE HOLLOW NOT FILLED.

In Queens county tenders were asked for a wooden bridge and ap-The specifications were proaches. exact as to the length and height of the embankment from the end of the bridge to a neighboring hill. The embankment was thought to represent about half the cost of the work. The figures of the favorite were so low that the other tenderers were surprised. They were not surprised when they saw how the work was done. The hollow was not filled at all, but the road dropped down to the old level and then climbed the hill again. If the local men had been allowed to tender on the job as it was done they would have made much lower offers than the one accepted. These are a few of many instances.

## THEN THE EXTRAS.

Then Mr. Emmerson's contractors

come in strong on extras. Here are some. The following table gives contract prices and the sums actually paid in the case of a number of bridges. Particulars in each case can be furnished if necessary:

Contract price.

Amount paid.

\$1,925	\$2,456
1,130	1,447
1,375	1,563
420	587
1,450	2,393
2,500	4,440
759	908
1,490	1,981
475	533
250	312
449	672
770	822
1,465	2,633

It would thus appear that the two and three price system which is the rule in steel bridges is applied as far as possible in substructure and in small bridge contracts. When it is considered that the department of public works is expending from \$250,000 to \$300,000 a year it will be seen that though the present system may be good for contractors it is bad for the taxpayers.

# NOVA SCOTIA BRIDGES.

They Are Good for One Hundred Years or More if Looked After,

HALIFAX, January 28.—Your correspondent saw Premier Murray, Chief Commissioner Church and Provincial Engiaeer Murphy in respect to Mr. Emmerson's statements disparaging the Nova Scotia bridges. Premier Murray said: "You can well understand why I do not wish to say anything just now on the bridges of Nova Scotia, nor lo I propose to do so. When the question is made an issue in this province we will discuss it fully."

Mr. Church said practically the same thing though less forcibly.

Provincial Engineer Murphy laughed ironically when I referred to Mr. Ernnerson's statement about the thort life of Nova Scotia iron bridges, "I don't care to say anything about New Brunswick bridges, nor to compare them with ours, but you may quote me as saying that Nova Scotia's bridges are good for one hundred years and more if looked after. Our wooden bridges will live twenty-five years. I don't know personally much

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Your cor-Murray. and Pron respect ients disbridges. can well ish to say bridges of ose to do made an ill discuss

ally the ibly. hy laughd to Mr. oout the m bridges. ing about r to comyou may Yova Scoe hundred ter. Our wenty-five ally much about bridges built since Premier Emmerson's time, but I do know that our bridges are as I have told you, good for a hundred years or more. I am sorry I can't give you more information, but I'm not in a position to do so.'

# STOCKTON'S VIEWS

# From His Address to the Electors.

Our system of auditing the public accounts should be entirely changed. The auditor general of this province holds his office at the pleasure of the government of the lay. He can be dismissed from office at any time. At Ottawa it is not so. The auditor general there is independent of the government. It should be the same in New Brunswick. It should be his duty to see that no accounts are paid unless authorized by law; that youchers are produced for each payment, and all accounts, showing in detail the items, on which payments are made should be filed in his office. It is almost needless to say we have no such system at present.

The expenditure of public money should be by public competition and tender. Thousands of Jollars under the present government have been expended yearly by private contract without competition.

# GIVEN TO FAVORITES.

The work has been friends and favorites of the government to the advantage of the contractor, but not in the interest of the taxpayer. To ensure honesty and economy there should be public competition and tender, and the successful tenderer should be compelled faithfully to carry out the terms of his contract. The names of all the tenderers and the amounts for public services should appear annually in some public report. In Nova Scotia, for the construction of bridges, the names of all the tenderers and the amounts are published yearly in the provincial engineer's report. should have a similar system in this province. Such a system honestly carried out would have saved New Brunswick, luring the past few years, tens of thousands of dollars. The people are entitled to the fullest information out do not get it.

The expenditure on by-roads is not satisfactory. We must have good reads. They add to the value of every farm along which they pass.

Here the evils of favoritism are particularly seen.

# THE BY-ROAD MONEY.

. The political necessities of the government have led hand over the by-road money to their friends in the different counties, not so much for improving the roads as to strengthan the government. I am satisfied it would be better for the road service, as far as practicable, to allow the by-road money to be spent through the municipalities. Those having local knowledge, and who are directly interested in having good roads, under that system would be responsible for spending the money to the best advantage. It would still be the duty of the government to see that the municipal officers faithfully spent the money.

The Highway act of 1896 is not satisfactory as a general law. It has too much machinery. When the bill was before the house members of the suggested opposition amendents, which, if accepted by the govern-ment, would have made it more it more satisfactory. The act of 1886, with some amendments, would be a much

hetter law.

# TWO BRIDGES BETTER THAN TWO PRICES.

The expenditure on great roads and bridges is made through the department of public works. In addition to the yearly grant the government have given bonds to the amount of ever half a million dellars for building that they call permanent bridges. For the superstructure of all those oridges built within the last five years, so far as can be ascertained, Mr. Emmerson, without comretition or tender, has paid two prices, and in some cases even more. The province should have two bridges where there is but one. It would have been far better in the public interest to have paid a fair price and have two bridges than two prices and have but one brilge. The application of ordinary business principles would have savel large sums of money. Mr. Emmerson and his government do not wish to face an investigation before a committee of the legislature, and the present election is brought on to escape full exposure. This is the hope and expectation of the government. Is it possible that the public conscience of the province is so dead as to condone such acts on the part of Mr. Emmerson and his government? I cannot think so.

# THE FACTS SUMMED UP.

The facts set forth in the foregoing pages in relation to steel bridges are briefly summed up below. The cost of the Petitcodiac bridge superstructure is found by deducting from the cost of the whole bridge the amount of the second lowest tender for the substructure. By taking the lowest tender the case would have been made stronger, but as the second lowest represents the price which was actually paid for the part of the work it has been taken.

The cost of the Port Elgin superstructure is found by deducting from the total cost of the bridge the amount of the lowest tender for the substructure, and in allowing a further sum of \$500, which is three times too much, for extras. The market price of the smaller bridges is made four cents per pound and those of the Petiteodiac and Port Elgin 3\frac{3}{4} cents, while the Lefebvre, Blackville and Campbell bridges, built later, are computed at 3\frac{1}{2} cents. All those prices are higher than the real market price at the time.

	Cost the Province.	Market Price.	Loss to the Province.
Lefebvre bridge	. \$15,350	\$7,120	\$8,230
Blackville bridge	. 10,459	5,193	5,266
Campbells' bridge	. 10,400	4,559	5,841
Petitcodiae bridge	. 5,172	1,500	3,672
Port Elgin bridge		1,000	4,500
Saunders' Brook bridge		144	304
Dingee bridge	. 1,186	503	683
Grand Manan bridge	. 1,233	373	860
Mill Cove bridge	. 1,280	365	915
Total.	\$51.028	\$20,757	\$30,271

The Government has withheld the accounts of other bridges, but computing on the basis of the cases that are known the following over-payments have been made:

w. •	Loss to the Province.
Bathurst bridge	\$7,300
Tabor's bridge	2,400
Cuisack's bridge	2,500
Hutcheson bridge	1,500
Bull Creek bridge	
Total,	\$15,200

Scores of smaller bridges have been let to favorites at excessive prices with bills of extras added.

Changes in specifications after the contracts have been let have given substructure contractors tens of thousands of dollars.

The table given on page 14 shows that on 13 small contracts amounting altogether to \$15,528, the extras allowed brought the total price up to \$20,645. What chance is there for an honest contractor against such a system as this?

