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# TELEGRAPH CABLES

(FURTHER PAPERS RELATING TO).

[In continuation of Paper F.-8, presented on the 27th July, 1898.]

*Presented to both Houses of the General Assembly by Command of His Excellency.*

## PROPOSED PACIFIC CABLE.

No. 1.

The Hon. AUDLEY COOTE, Sydney, to the Hon. the POSTMASTER-GENERAL, Wellington.  
Waverley Park, Sydney, — May, 1898.

*Re Pacific Cable.*

DEAR SIR,—

I have the honour to bring under your notice an article which appeared in the *Electrical Review* on the 4th and 18th March of this year under the title "The Empire and Telegraph-cables." I enclose herewith a reprint of the article, which will, I feel sure, be of special interest to you just now, when the British Government has under consideration the proposal from the Premiers of Australia in respect of the Pacific cable.

It is my intention to hand the article as well to the Australian Press, as their interests, although of less Imperial importance than those of the Governments of Australasia and Canada, must also be furthered by the carrying-out of the project which I have so long advocated—viz., the completion of the link still wanting in the chain of telegraph-cables encircling the globe, and the connection on that link of the colonies of Australasia and the great islands of the Pacific Ocean.

I have, &c.,

The Hon. the Postmaster-General, Wellington, New Zealand.

AUDLEY COOTE.

## Enclosure in No. 1.

### THE EMPIRE AND TELEGRAPH-CABLES.

[Reprinted from *The Electrical Review*.]

In the varying accounts of a new and important scheme of telegraph-cables which have lately been widely circulated among the Press throughout the colonies as well as in England there is to be found sufficient internal evidence to warrant us in concluding that all of these emanate from a single source. Although differing somewhat in the manner in which the statements are presented, as well as in the style of treatment, still, in the main body of these paragraphs and articles the recurrence of the same prejudiced and garbled statements all point to a common source of origin. We have frequently dealt in detail with the numerous points raised, but, as the subject has assumed a more interesting aspect lately, owing to the aggregation of errors which are now being so widely disseminated, it is, perhaps, well that the more important of these should again be treated of at the present time.

The subject of a system of submarine cables, which, starting from England, would be carried on to Cape Town, touching only at the various British possessions on the way, is not a new one, nor is the proposed continuation of such a line from Natal to Australia, *via* Mauritius, Rodriguez Island, and the Keelings, a new conception. A somewhat similar scheme was fully dealt with by Mr. Hofmeyr when representing the Cape of Good Hope at the Imperial and Colonial Conference held in London in 1887, and was recommended by him as an addition to the scheme for a cable across the Pacific Ocean from Canada to Australasia, which was one of the principal subjects before the Conference. This additional scheme, which, as a supplement to the Pacific cable, it may be remembered, was rendered necessary by the inefficiency of, and frequent interruptions to, the then existing system of cables, has lately assumed an importance which ten years ago it did not possess.

About the time of the first Colonial Conference it was the cables to Australia which were continually breaking down, but latterly the cables to the Cape have deprived them of the record for frequency of interruption, and therefore the supplementary scheme referred to by Mr. Hofmeyr is strongly advocated by the Eastern Extension Telegraph Company, the Eastern Telegraph Company, and its offshoot the Eastern and South African Telegraph Company, the latter of which suffers both in purse and reputation owing to the frequency of interruptions to the Cape cables.

The point to which we take most serious objection is that the popular advocates of Mr. Hofmeyr's project hope to advantage their cause by a continuance of the system of inaccuracy in figures and statements advanced, and by so doing to prejudice opinion against the Pacific cable route. For example, it used to be roundly asserted that the depth through which a Pacific cable would have to pass was "estimated at 12,000 fathoms (or fourteen miles) in some places." This assertion was contained in a note from the Postmaster-General of South Australia to his Government, and, coming from such a source, aroused a natural objection on their part to examine any further into the matter, more especially when the same authority further asserts, in the same note, with a courageous confidence worthy of a better cause, that "as the Government are aware, I have given this subject very great and careful consideration—more so, perhaps, than any one else." We are glad to see that this figure (an utterly imaginary one) is now reduced, by others better informed, to "a depth of five miles;" it is not, however, made clear by these recent critics that this latter depth (which really does exist) occurs in an isolated depression which is more than 600 miles away from the proposed Pacific cable route. We may mention here that there are two cables lying in West Indian waters which were laid within sixty miles from a similar depression, more than four miles and a half in depth, and one of them has been working for over twenty-five years without giving any exceptional trouble. An unbiassed examination of the Admiralty charts will prove to any one that along the proposed route of the Pacific cable the general depth to be expected in the deepest sections averages about 2,700 fathoms, and that the greatest depth would in all probability not be more than 3,200 fathoms—a depth, we may say, no greater than that in which a cable has recently been laid between New York and Hayti, and about the same as that met with along the line of the Government-supported cable which has just been laid from Bermuda to Jamaica. The Pacific cannot, therefore, be looked upon as an ocean of impossible depths, nor one where a cable cannot be picked up if necessary; indeed, experience teaches us that a cable has been picked up at the depth mentioned. The route sketched out *via* the Cape to Australia has, as yet, been but very imperfectly surveyed; it seems, however, to have an average depth similar to that through the Pacific Ocean, and in one place at least along the Cape line there is a depth of nearly 3,200 fathoms. Thus it will be seen that as regards depth of water the supplementary route has absolutely no advantage over the Pacific line.

It is true that a cable between Vancouver and Fanning Island would be longer than any one length suggested for the supplementary route, but the length required would exceed by less than 250 miles that of a cable at present being laid across the Atlantic, and would in reality be about 250 miles less in length than the advocates of the Cape route make it out to be. The following quotation from an Australian paper is another sample of the class of information circulated. Referring to the Vancouver-Fanning Island section, we are told, "This section is practically twice the length of the longest section of the 'Cape' proposal." Now, this is an utterly misleading statement, as the real length of the section spoken of is here increased, for the purpose of condemning it, by some 1,200 miles. As the writer in this case illustrates his article by a map on which the proposed lengths of "the Cape route" are all carefully set down, it seems incredible that he should be so ignorant as he would appear to be regarding the original scheme, which he criticizes adversely. It has also been said that, being a "single line," the Pacific cable has no alternative in case of interruption; but those who, in their anxiety to furnish objections, advance this as an argument seem to forget that, if correct, the same objection also applies to the proposed single line from the Cape, and that, should either of these single lines break down, the already existing cables to Australia would afford more or less useful alternatives to one as much as to the other of these proposed single lines.

We have dealt with some of the more prominent of the objections which are now being revived against a cable through the Pacific. The "enormous depths" of this ocean, it will be seen, are now discounted, and we even find it put forward, with an austere assumption of impartiality, that the great depth of water through which the Cape cable must pass would obviate the serious danger of interruption to which the existing lines to Australia are exposed in the shallow Java Sea. We quite agree with the opinion expressed that the present cables which pass through the Mediterranean would probably be rendered useless in case of warlike complications, as this did actually happen during the Egyptian war; but we would go still further and point out that the same objection applies with equal force to several sections along the proposed Cape route, which, in places, would necessarily have to lie in very shallow water, and where they could be easily cut by the enemy. Take, for example, the section which would pass off Brest, where, for more than 150 miles, all the existing lines to Africa and the East are in water of less depth than 100 fathoms; and through this dangerous belt it is now seriously proposed to lay a strategic cable. In the case of the Pacific scheme any such danger is quite avoided.

To turn to another aspect of the new "supplementary" scheme, we find that to carry it out some 13,700 miles of cable would be necessary, to which should be added 1,000 miles of land-line from Cape Town to Natal. We also find that the cable would be landed in no less than eleven different places—almost all points of weakness—the last being the town of Perth, in Western Australia. As opposed to this, we find in the Pacific that the length would only be 7,600 miles, and the landing-places only five in number, lying in a part of the ocean little frequented by foreign vessels of war, the cable terminating between the towns of Sydney and Brisbane, on the east coast

of Australia. Should the cable bifurcate from Norfolk Island to New Zealand an additional length of 450 miles will be necessary, and an additional landing-place will be created. In continuation of this comparison, it should be borne in mind that the two existing cable routes to Australia converge at Java, and, bifurcating thence, end, one at Port Darwin in the north of Australia, the other at Roebuck Bay in the north-west of Western Australia. Thus we find that to reach the centres of the greatest population, which lie in the east and south-east of the continent, telegrams have to travel over very great lengths of land-lines. In the case of the Roebuck Bay cable there is a distance of about 3,300 miles to be traversed from that point before even Melbourne is reached, and more than 4,200 miles (about half the length of the Pacific cable) before Brisbane is reached. Again, a telegram *via* Roebuck Bay, destined for the town of Burketown in Queensland, has to travel over a length of land-line which is greater than the distance between London and Calcutta, or several hundreds of miles more than the distance intervening between London and Vancouver. The land-wire from the Port Darwin cable-station is not so long, giving about 2,400 miles to Melbourne and 3,300 miles to Brisbane. It is now, we are told, proposed to land the "Cape" cable at Perth, the capital of Western Australia, which is more than 2,000 miles by land-line from Melbourne, and over 3,000 miles from Brisbane. On the other hand, in the case of a cable landing on the Pacific coasts of Australia the main centres of population and commerce are within easy reach, Melbourne being only about 450 miles south of Sydney by land-line, while Brisbane is about 530 miles to the north. The great importance of these figures will be at once evident when we realise that the long land-lines from Port Darwin and Roebuck Bay, the only means by which telegrams from Europe can be forwarded at present, have been interrupted on no less than fifteen occasions during the last six months, the duration of each of these interruptions varying from a few hours to several days. In speaking recently of the Roebuck Bay land-line, Sir Charles Todd, the Postmaster-General of South Australia, says it "is acknowledged to be the worst line in Australia, the many fogs on the coast rendering it very hard to get signals through." It is thus clear that a Pacific cable would offer advantages which cannot reasonably be looked for, either in the case of existing cables, or in that of the proposed cable from the Cape. The land-lines in the compact group of colonies, Victoria, New South Wales, and Queensland, are numerous, and here reliance has not to be placed on long single wires, as in the cases above referred to. Duplicate communication with New Zealand can be easily assured by a short branch cable from Norfolk Island. The advantages above indicated are obvious, if we consider that the population in the south and east of Australia is about 4,200,000, who carry on a total export and import trade equal to about £120,000,000 annually, employing for this purpose some 17,000,000 tons of shipping. It would therefore seem beyond dispute that a cable landing right in the heart of this busy district is much more to be desired, and is much more worthy of support, than one which would terminate in Western Australia, in which vast area (eleven times the size of Great Britain) the total population, although increasing, is less than that of the town of Cardiff, and the trade and shipping correspondingly small, the exports and imports for 1896 being valued together at something over £8,000,000.

We propose to touch but lightly on the financial side of the question. We were informed through the Press that the cable to be laid *via* the Cape is to be carried out in return for "certain privileges." Some light has recently been thrown on the nature of these privileges, one of which seems to be the payment of £25,000 per annum by the Cape Government for twenty years; another being the prolongation of the annual subsidy of £32,400 which has been paid by the Australian Governments to the Eastern Extension Telegraph Company since 1879, and which, if not renewed, will lapse in July, 1900. There may be other concessions which have not yet come to light.

It is a question whether the limits of modesty are not being overstepped, when we remember that one of the companies concerned, *i.e.*, the Eastern Extension Telegraph Company, has already received from Australasia subsidies amounting to over £750,000; and that in the ten years ending December, 1896, the annual receipts of this company, which are now about £640,000 (including subsidies), have increased by £187,459, and this notwithstanding a reduction in rates of about 50 per cent., which was only brought about under great pressure. An allied company, the Eastern and South African Telegraph Company, of which almost the entire capital is held by the Eastern Telegraph Company, has received in subsidies from various Governments a total of considerably over £1,000,000. It is not, perhaps, a cause of wonder that even a far-fetched attempt should be made to secure the continuance of similar "privileges," but we do not think that it is at all in the interests of the colonies, or of England, to assist in the consolidation of any such monopoly.

We have dealt at this length with the subject as it seemed only fitting and just that, however useful a cable to Australasia *via* the Cape may be, the claims to superior utility, both strategic and commercial, of a cable *via* Canada to Australasia should not be undermined by the circulation of misleading information.

## No. 2.

The SECRETARY, General Post Office, Wellington, to the Hon. AUDLEY COOTE.

SIR,—

General Post Office, Wellington, 2nd June, 1898.

I have the honour, by direction, to acknowledge the receipt of your letter of the — ultimo, forwarding a reprint of a newspaper article which appeared in the *Electrical Review* of the 4th and 18th March last under the title of "The Empire and Telegraph-cables." The Postmaster-General desires me to thank you for the article, which he has read with much interest.

I have, &c.,

The Hon. Audley Coote, Waverley Park, Sydney.

W. GRAY, Secretary.

## No. 3.

Sir SANDFORD FLEMING, Ottawa, to the Hon. the PREMIER, Wellington.

(Telegram.)

Ottawa, 29th June, 1898.

SINCE writing you 23rd June [not printed] think advisable leave share Canada New Zealand open, and hope you will offer simply New Zealand will join Canada in making up quota of one-third. Could you instruct Agent-General to arrange proportions?

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## No. 4.

The AGENT-GENERAL to the Hon. the PREMIER.

(Telegram.)

London, 19th July, 1898.

CONFIDENTIAL: Pacific Cable. — Canadian Postmaster-General in London. Have ascertained Canadian views on cable friendly but indefinite. Agents-General Queensland, Victoria, New South Wales, myself glad have authority meet Imperial Government and Canada here at informal conference view facilitate adoption some scheme. No binding decision to be settled, but opinions conference to be sent to respective Governments. Glad you authorise me accordingly.

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## No. 5.

The Hon. the PREMIER to the AGENT-GENERAL.

(Telegram.)

Wellington, 21st July, 1898.

PACIFIC CABLE.—Referring to your cablegram nineteenth, much pleasure authorising you confer with other Agents-General and representatives of Imperial Canadian Governments as proposed.

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## No. 6.

The Hon. the PREMIER, Melbourne, to the Hon. the PREMIER, Wellington.

(Telegram.)

Melbourne, 25th July, 1898.

CONFIDENTIAL.—I received the following telegram from our Agent-General, viz.: "London, 19th July.—Confidential: Pacific cable.—Canadian Postmaster-General now in London. I have ascertained Canadian views on cable friendly but indefinite. Agents-General for Queensland, New South Wales, New Zealand, and I would be glad to receive authority to meet Imperial Government and Canada here at informal conference, with a view to facilitate adoption of some scheme. No binding decision to be arrived at, but opinion of conference to be transmitted to respective Governments. Should be glad to know whether you will authorise me accordingly.—ANDREW CLARKE." Probably you received similar message. I replied that this Government had no objection to conference on terms proposed.

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## No. 7.

The Hon. the PREMIER, Wellington, to the Hon. the PREMIER, Melbourne.

(Telegram.)

Wellington, 25th July, 1898.

YES, I received a cable from our Agent-General same terms as yours, and replied that I saw no objection our Agent-General attending conference so long no committal.

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## No. 8.

The Hon. the PREMIER, Wellington, to the Hon. the PREMIER, Brisbane.

(Telegram.)

Wellington, 28th July, 1898.

PACIFIC CABLE.—Our Agent-General also instructed.

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## No. 9.

The AGENT-GENERAL to the Hon. the PREMIER.

(Telegram.)

London, 29th July, 1898.

PACIFIC CABLE CONFERENCE.—Suggest communicate Premier, Queensland. Only he and yourself can save scheme and secure for colonies reduced cable-rates. Outside Queensland and New Zealand every one lukewarm. Am convinced cable will pay from outset. Involve no burden taxpayers.

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## No. 10.

The Hon. the PREMIER and COLONIAL TREASURER, Sydney, to the Hon. the PREMIER, Wellington.

(Telegram.)

Sydney, 1st August, 1898.

HAVE received the following cable, dated the 29th July, from our Agent-General: "Pacific Cable: Informal conference held to-day. Canada represented by Postmaster-General and High Commis-

sioner for Canada; New South Wales, Victoria, Queensland, South Australia, New Zealand by Agents-General. Canadian representatives suggested Canada would probably guarantee two-ninths of total cost, but not more. Her Postmaster-General undertook to do his best for scheme on this basis. Imperial Government contribution will certainly not exceed one-third. Can Australasian Colonies guarantee remaining four-ninths? Please telegraph reply before 10th proximo. Please inform other Governments." Since receipt of above the following cable has been received: "Referring to my telegram of 29th July, I beg to point out that Imperial Government, Western Australia, and Tasmania were not represented at informal conference."

## No. 11.

The Hon. the PREMIER, Wellington, to the Hon. the PREMIER, Sydney.

(Telegram.)

Wellington, 4th August, 1898.

PACIFIC CABLE.—Your message first received. Kindly let me know replies from other colonies, and what your colony prepared to do. New Zealand strongly favours the Pacific cable.

## No. 12.

The Hon. the PREMIER, Wellington, to the Hon. the PREMIER, Brisbane.

(Telegram.)

Wellington, 4th August, 1898.

PACIFIC CABLE.—Have received message from Agent-General conveying purport of suggestion made by conference, of which you, no doubt, have also been advised. I am most anxious to co-operate, and to see the scheme adopted. Have referred matter to Committee of House of Representatives for consideration and report. I should be glad to have your views, and also to know support likely to be given by the other colonies.

## No. 13.

The Hon. the PREMIER to the AGENT-GENERAL.

(Telegram.)

Wellington, 4th August, 1898.

PACIFIC CABLE and your telegram 29th: Matter now before Public Accounts Committee. Hope favourable reply in few days. Have communicated with Queensland.

## No. 14.

## PAPERS OF THE CANADIAN HOUSE OF COMMONS.

RETURN (No. 94) to an ADDRESS of the HOUSE of COMMONS, dated the 18th April, 1898, for a copy of the Report of the Committee appointed by the Imperial Government in 1896 to consider the question of a telegraph-cable between Canada and Australasia; also, of any reports or correspondence to the Canadian Government from the Canadian representatives on said Committee, or Sir Sandford Fleming, in regard to the same subject.

By order.

R. W. SCOTT, Secretary of State.

SIR,—

Department of Trade and Commerce, Ottawa, 21st May, 1898.

I have the honour to hand you herewith a return to an address of the House of Commons of the 18th of April ultimo, "for a copy of the report of the Committee appointed by the Imperial Government in 1896 to consider the question of a telegraph-cable between Canada and Australasia," &c., in so far as the Government is at liberty to publish the same.

The report itself asked for is held as confidential, under instructions from the Imperial authorities not to publish until permission is given to do so.

A recent cable to the High Commissioner stating that a call had been made for the report brought a reply to the effect that the Treasury considers it inadvisable to publish the report before Her Majesty's Government have arrived at a decision as to the policy to be adopted.

The other papers called for are herewith complete.

I have, &c.,

W. G. PARMELEE, Deputy Minister.

Joseph Pope, Esq., Under-Secretary of State, Ottawa.

## REPORT of SANDFORD FLEMING to the Hon. the MINISTER of TRADE and COMMERCE.

SIR,—

Ottawa, 30th January, 1897.

On the 21st October last I had the honour to be officially notified by you of my appointment, by Order in Council, associated with Sir Donald A. Smith and the Hon. Alfred G. Jones, to represent the Canadian Government at the Pacific Cable Conference to meet in London at an early date. Leaving Ottawa the following day I was able to report myself at the Colonial Office on the 3rd November.

Before the Imperial Cable Committee could be called together a difficulty presented itself. In accordance with the original design of the Secretary of State for the Colonies, it had been determined that there should be two representatives for Canada, two on the part of the Australasian Colonies, and two for the Home Government. As it was held to be expedient to adhere to this arrangement it became necessary to reduce the number of the Canadian representatives.

Recognising the importance of the Dominion being represented on the Imperial Committee by the High Commissioner and an ex-Minister of the Crown of the status of Mr. Alfred Jones, I expressed my willingness to retire. On Wednesday, 7th November, I wrote the Secretary of the Committee to that effect, and requested him to inform the Chairman, Lord Selborne, that, as Mr. Laurier, the Premier, had been good enough specially to ask me to assist in the business of the Committee, I was prepared to meet his wishes and those of the Committee itself as far as I was able, and as might be considered expedient.

On 9th November I learned by telegraph from Ottawa that the Order in Council appointing me one of the Canadian representatives in conjunction with Sir Donald A. Smith and the Hon. A. G. Jones had been cancelled, and that a new order had been passed appointing these two gentlemen to serve on the Committee, and myself to act as expert adviser.

On 10th November I received a note from the Secretary of the Committee in reply to my letter of the 7th, conveying, on behalf of Mr. Chamberlain and Lord Selborne, an expression of their thanks, asking me to attend the first regular meeting of the Committee.

The Committee met to receive evidence on the 12th November. I appeared as the first witness, when I submitted my views as they are set forth in Statement No. 1 appended. My examination continued throughout the sitting, as will appear in the printed proceedings.

The investigation was continued from week to week until the middle of December. At the conclusion of the examination of witnesses I placed in the hands of the Canadian representatives, on 16th December, a "note" reviewing the evidence and furnishing additional information which I considered would be useful to the Committee. Had I been recalled I would have embraced the opportunity of submitting this additional information as part of my evidence, for the reason that the facts presented throw light on points of importance, and remove doubts as to the weight which should be attached to the testimony of some of the witnesses.

I beg leave to refer you to my "note" of 16th December, which I append, and ask you to consider it part of this report. (See Statement No. 2.)

With your permission I will briefly summarise the results of the investigation :—

1. All doubts as to the practicability of laying an electric cable from the western coast of Canada to the Australasian Colonies, touching only on islands in the possession of Great Britain, is now entirely set at rest. The best authorities known were examined, and not one of them expressed the least misgiving on this point.

2. It has been definitely ascertained that the total cost of a cable of the type recommended would be less than one and a half million pounds sterling (£1,500,000).

3. The evidence goes to show that the annual charges, including interest on capital, allowance of maintenance and renewal, sinking fund to provide for the replacement of capital in fifty years, together with all ordinary working-expenses, would not exceed the following amounts: Interest at  $2\frac{1}{2}$  per cent., £37,500; maintenance and renewal, £70,000; sinking fund, £15,386; working-expenses, £22,114: total annual charges, £145,000.

4. With respect to the earning capability of a cable of the Lord Kelvin type, this is fully discussed in my "note" of 16th December. All the best evidence establishes that, worked with modern transmitting and receiving apparatus precisely as the Atlantic cables are now worked, the Pacific cable would be capable of transmitting twelve paying words per minute. At this rate the cable, fully employed for eighteen hours a day and three hundred days in the year, would transmit 3,888,000 paying words in twelve months. Moreover, this is not the full capacity of the cable, as there would be nothing to prevent it being worked twenty-four hours each day, if business required. It is obvious, therefore, that the cable proposed to be laid would have ample capacity for transmitting a full share of the business for a considerable number of years to come. The whole telegraph traffic between Australasia and Europe in 1895 did not exceed 1,948,369 words, and it is not claimed that more than one-half of the whole would be diverted to the new route. The returns for 1896 have not yet been received.

5. The revenue cannot be definitely ascertained. We have, however, in the existing business, and in statistics respecting its continual growth, excellent data for forming fairly reliable estimates. The Government returns indicate a remarkable vitality in telegraphy between these distant colonies and Great Britain. Notwithstanding the very high charges exacted from 1875 to 1890, never less than 9s. 4d. per word, the number of words transmitted increased within each period of five years 11 per cent. per annum, and during the whole fifteen years the growth was equal to an annual average of 16·8 per cent. Since 1890 the tariff has been lowered from 9s. 4d. to 4s. 9d. per word, and the average yearly increase for each of the five years ending with 1895 has been 27 per cent. While it is not to be expected that this extraordinary growth will be continued indefinitely, there can be no reasonable doubt that a still further reduction in charges on messages, consequent on the completion of the Pacific cable, will stimulate telegraphy and tend further to increase traffic for some time to come. I have already, on various occasions, presented my own views and calculations respecting the probable volume of business in future years. I need not repeat them here. I shall, however, submit carefully prepared estimates based on the opinion of others. In each case it will be assumed that the cable will be in working-order by the beginning of the year 1900, and the estimates will indicate the possible earnings for six years from that date. The gross earnings will be reckoned at the rate of 2s. a word, and from which will be deducted an expenditure of £145,000 annually, the sum considered sufficient to include all charges.

In Estimate No. 1 it is assumed that of the 1,948,369 words transmitted in 1895 the share of the Pacific cable would be 750,000 words, or  $38\frac{1}{2}$  per cent. of the whole, and that there would be an increase of traffic averaging 10 per cent. each year.

*Estimate No. 1.*

| Year.                      |     | Gross Earnings.<br>£ | Annual Charges.<br>£ | Deficiency.<br>£ | Surplus.<br>£ |
|----------------------------|-----|----------------------|----------------------|------------------|---------------|
| 1900                       | ... | 120,788              | 145,000              | 24,212           | ...           |
| 1901                       | ... | 132,866              | 145,000              | 12,134           | ...           |
| 1902                       | ... | 146,153              | 145,000              | ...              | 1,153         |
| 1903                       | ... | 160,768              | 145,000              | ...              | 15,768        |
| 1904                       | ... | 176,845              | 145,000              | ...              | 31,845        |
| 1905                       | ... | 194,529              | 145,000              | ...              | 49,529        |
| Totals                     | ... | ...                  | ...                  | 36,346           | 98,295        |
| Net surplus by end of 1905 |     |                      |                      |                  | 61,949        |

In Estimate No. 2 it is assumed that of the whole number of words transmitted in 1895 (1,948,639) the share of the Pacific cable would be 811,932 words, or about  $41\frac{1}{2}$  per cent., being the mean between one-third and one-half of the traffic, and that the annual increase will average  $12\frac{1}{2}$  per cent., the mean between 10 per cent. and 15 per cent.

*Estimate No. 2.*

| Year.                      |     | Gross Earnings.<br>£ | Annual Charges.<br>£ | Surplus.<br>£ |
|----------------------------|-----|----------------------|----------------------|---------------|
| 1900                       | ... | 146,414              | 145,000              | 1,414         |
| 1901                       | ... | 164,715              | 145,000              | 19,715        |
| 1902                       | ... | 185,304              | 145,000              | 40,304        |
| 1903                       | ... | 208,470              | 145,000              | 63,470        |
| 1904                       | ... | 234,725              | 145,000              | 89,725        |
| 1905                       | ... | 264,066              | 145,000              | 119,066       |
| Net surplus by end of 1905 |     |                      |                      | 333,694       |

When in London I deemed it important to obtain from leading Australians information bearing on the question of revenue. The steps taken are set forth in my note of the 16th December, and the information obtained is given in the appended paper, in which also will be found a list of the gentlemen who were good enough to favour me with their opinions. The following estimate (No. 3) is based on the opinions generally expressed, namely, that the Pacific cable will obtain 50 per cent. of the whole business, and that telegraph traffic will increase annually at the average rate of 15 per cent.

*Estimate No. 3.*

| Year.                      |     | Gross Earnings.<br>£ | Annual Charges.<br>£ | Surplus.<br>£ |
|----------------------------|-----|----------------------|----------------------|---------------|
| 1900                       | ... | 195,960              | 145,000              | 50,960        |
| 1901                       | ... | 225,354              | 145,000              | 80,354        |
| 1902                       | ... | 259,157              | 145,000              | 114,157       |
| 1903                       | ... | 298,031              | 145,000              | 153,031       |
| 1904                       | ... | 342,735              | 145,000              | 197,735       |
| 1905                       | ... | 394,144              | 145,000              | 249,144       |
| Net surplus by end of 1905 |     |                      |                      | 845,381       |

The calculations are made on the assumption that the cable will be completed and in operation by the beginning of 1900. Each of the three estimates shows a net surplus by the end of 1905 as follows: Estimate No. 1, net surplus earning by end of 1905, £61,949; Estimate No. 2, net surplus earning by end of 1905, £333,694; Estimate No. 3, net surplus earning by end of 1905, £845,381.

The data on which No. 1 is based have been taken with excessive caution, and I feel warranted in saying that the estimate itself may be regarded as a minimum estimate. No. 2 must be held to be an extremely moderate estimate. No. 3 is based on the general opinion of many gentlemen of high standing, the heads of great mercantile firms, and others familiar with Australasian trade and prospects. Such opinions must undoubtedly carry with them great weight. According to Estimates Nos. 2 and 3 the earnings of the Pacific cable for transmitting European-Australasian telegraph traffic would yield a surplus from the first year of its operation. In addition to a share of the Australasian-European business, the Pacific cable will be in a position to obtain all the traffic between Australasia, Canada, and the United States. There are no data to admit of any proper estimate being formed of the trans-Pacific new traffic, but it is not improbable that with a direct cable and low rates it will rapidly develop, and in a few years assume substantial proportions.

In concluding this summary of the results of the recent investigation, I feel fully justified in saying that the estimates of revenue establish beyond all doubt that the Pacific cable, if laid as a national undertaking under Government control, will be more than self-supporting.

The sums which form a charge on gross earnings in each case provide, it may be said, for a double replacement of capital. The allowance for maintenance insures the complete renewal of the cable in addition to meeting the cost of current expenses, and the sinking fund provides for the

extinction of the original loan when it matures. All surplus earnings may therefore be regarded as profit; but, as the national object to be attained in establishing the cable is not to realise dividends, the policy of the contributing Governments, when profits accumulate, will probably be to lower the tariff of charges, and by this policy confer additional benefits on trade and commerce.

I have, &c.,

SANDFORD FLEMING.

Hon. Sir Richard Cartwright, Minister of Trade and Commerce.

STATEMENT No. 1 (referred to in the preceding Report of Mr. Fleming), submitted in evidence to the Imperial Cable Committee, 12th November, 1896.

Before expressing my views generally on the Pacific cable, I am asked to relate to the Committee the circumstances which led to the proposal to span the Pacific Ocean by telegraph. I comply with the request with some hesitation, as I am obliged to allude to my personal connection with the matter. In referring to this part of the subject I shall confine my remarks to a very few brief sentences.

The projected submarine electric cable across the Pacific from the western seaboard of Canada has been before the public for many years. The proposal to extend a telegraph to Asia and Australia naturally followed the establishment of a trans-continental telegraph through the Dominion. So far back as 1863 the overland telegraph was projected in conjunction with the trans-continental railway. In that year the explorations for the eastern section of the railway, between Halifax and Quebec, were undertaken by the Imperial and Provincial Governments, and in 1871 the surveys westerly to the Pacific Ocean were commenced by the Government of the new Dominion. A few years after these dates the construction of the telegraph was proceeded with on each respective section. The Hon. Alexander Mackenzie, Premier and Minister for Public Works, was one of the first to take an active interest in the matter. Under his administration the policy was adopted of extending the telegraph from the waters of the St. Lawrence to the Pacific coast; and in 1874 the Government entered into contracts for constructing the telegraph in advance of the railway over nearly two thousand miles of territory.

Occupying the position of engineer-in-chief of the whole line of railway from Halifax on the Atlantic to Vancouver on the Pacific, the establishment of the overland telegraph came under my official charge, and in connection with my duties my attention was directed to the extension of the electric wire across the Pacific. It became plain to me that the national line of communication on which Canada was then expending so much would be incomplete without a connection with the telegraph systems of the countries beyond the Pacific Ocean, and it became equally clear that the spanning of the Pacific by an electric cable would prove of the highest importance to the whole Empire.

In the year 1879 I was called upon to visit London on public business with the then Premier, Sir John Macdonald. I had prepared a telegraph map of the world, with the projected line across the Pacific and its various eastern and western connections laid down thereon. I pointed out that by spanning the Pacific it would be possible to open up a new means of communication to be employed for purposes of general commerce at much lower rates than by existing channels; that it would at once complete the electrical girdle of the globe, and bring Great Britain, Canada, India, Australia, New Zealand, and South Africa into unbroken telegraphic touch of each other, entirely independent of the lines which pass through foreign European countries. Sir John Macdonald submitted the map and explained the proposal to Lord Beaconsfield, and I was led to understand that both Premiers were very favourably impressed with the project, and regarded it to be of great Imperial importance. I am fully warranted in saying that the Canadian Premier so regarded it until his death in 1892. Public attention was for the first time directed to a British Pacific cable in my report as engineer-in-chief of the Canadian-Pacific Railway, which was laid before Parliament in 1880. In this report the map referred to is reproduced on a reduced scale.

Much correspondence followed, to which it is not now necessary to allude. I will only remark that the route first projected was a northern one; this was owing to the absence of information respecting the Southern Pacific Ocean, and the impression which prevailed that physical difficulties existed which offered insuperable obstacles to the laying of a cable on a direct route between Canada and Australasia. In consequence of this impression it was designed to lay the cable from Vancouver to Japan, touching at islands in the Aleutian and Kurile Groups as mid-ocean stations. From Japan the connection with Australasia would be obtained by means of the telegraph to Singapore and the Eastern Extension Company's lines of telegraph.

Through the intervention of the Home Government, negotiations were opened with the view of securing one of the Kurile Islands. Japan was asked to transfer to the British Crown one of these islands in order that the telegraph-station should be under British protection. The cession of an island was not obtained, but permission to land at any suitable point in Yesso was granted, the landing to remain in charge of and under the protection of Japan. (See letter 14th December, 1880, from Sir Harry Parkes, and 23rd December, from Sir A. T. Galt.) An agent was sent to Washington, who, after some difficulty, obtained conditional landing privileges on one of the Aleutian Islands.

On the 1st March, 1881, the Government of Canada introduced certain resolutions in Parliament with the view of promoting the establishment of the cable. After discussion the resolutions were withdrawn and an Act passed incorporating a company to lay the cable. This company proved abortive, and when its charter expired, further information having meanwhile been obtained respecting the Southern Pacific, it was represented to the Canadian Government that the physical features of the Southern Ocean would admit of a cable being laid on a direct route from Canada to Australia, and that the long detour by the Aleutian Islands and Japan could be avoided. (See my letter of the 20th October, 1885.) Correspondence followed, and on the 8th June, 1886, an Order in Council was passed by the Canadian Government recommending that means be taken to obtain an expression of opinion on the projected direct cable to Australia from the several Governments concerned, and to ascertain what amount of assistance each would be prepared to give, and that for this purpose a conference of agents of the colonies be invited to discuss the subject. The co-operation of Her Majesty's Imperial Government was likewise sought.

On the 25th November, 1886, the Home Government summoned a Conference to meet in London the following year, to which the principal Colonial Governments were invited to send representatives. One of the questions to be specially considered was the development of telegraphic communications of utility to the Empire.

At the Colonial Conference held in 1887 the Pacific cable was specially considered, and resolutions were passed in respect thereto strongly favouring its establishment. The published proceedings of the Conference give the discussions at length.

Since the Conference of 1887 repeated efforts have been made to induce the Admiralty to make a complete survey of the bed of the ocean on the most direct route for the cable. A statement respecting the nautical survey appears in the report of the Canadian Minister of Trade and Commerce on his mission to Australia in 1893 (pages 106 to 122).

In 1888 the Canadian Government invited the Governments of Australia and New Zealand to send delegates to Canada to consider the question of telegraphic connection and trade relations. Correspondence resulted, when it was finally agreed that delegates should be sent from Canada to Australia. In 1889 the Hon. J. J. C. Abbott (afterwards Sir John Abbott, Premier of Canada) with several other gentlemen were appointed to proceed on this mission, but the proposed federation of the Australian Colonies, then actively discussed, had the effect of postponing the visit. It was felt that the time was inopportune, and that it would be advisable to wait until the colonies would be united politically.

Early in 1893 a Postal and Telegraph Conference was held at Wellington, New Zealand, at which all the Australasian Colonies were represented, and resolutions were passed urging the establishment of a Pacific cable.

In September, 1893, the Canadian Minister of Trade and Commerce (the Hon. Mackenzie Bowell) was sent as a delegate to Australia to confer with the several Governments on the subject of the Pacific cable and the development of trade. A full account of this delegation will be found in the report on the mission to Australia (see pages 66 to 106).



As an outcome of the delegation to Australia, a Conference was held in Ottawa the following year (1894). At this Conference the Imperial Government, the Canadian, the South African, and all the Australasian Governments were represented.

The published proceedings of the Conference held in Ottawa in 1894 furnish a full account of the discussions. The following resolutions were passed in respect to the establishment of the Pacific cable: (1.) *Resolved*, That, in the opinion of this Conference, immediate steps should be taken to provide telegraphic communication by cable, free from foreign control, between the Dominion of Canada and Australasia. (2.) *Resolved*, That the Imperial Government be respectfully requested to undertake at the earliest possible moment, and to prosecute with all possible speed, a thorough survey of the proposed cable route between Canada and Australia; the expense to be borne in equal proportions by Great Britain, Canada, and Australian Colonies. (3.) *Resolved*, That it is for the interest of the Empire that, in case of the construction of a cable between Canada and Australasia, such cable should be extended from Australasia to the Cape of Good Hope, and for that purpose arrangements should be made between the Imperial and South African Governments for a survey of the latter route. (4.) *Resolved*, That, in view of the desirability of having a choice of routes for a cable-connection between Canada and Australasia, the Home Government be requested to take immediate steps to secure neutral landing-ground on some one of the Hawaiian Islands, in order that the cable may remain permanently under British control. (5.) *Resolved*, That the Canadian Government be requested, after the rising of this Conference, to make all necessary inquiries, and generally to take such steps as may be expedient in order to ascertain the cost of the proposed Pacific cable, and promote the establishment of the undertaking in accordance with the views expressed in this Conference.

Acting under instructions of the Conference of 1894, the Canadian Government invited cable-manufacturing contractors and others to state the terms upon which they would be prepared to lay and maintain in efficient condition a submarine electric cable across the Pacific from Canada to the Australasian Colonies. Proposals were invited in three different forms.

I herewith submit, for the information of the Committee, the detailed general conditions under which proposals were invited (see Appendix A); likewise the tenders subsequently received by the Canadian Government; likewise my report on the tenders, dated the 20th November, 1894, made at the request of the Minister of Trade and Commerce (see Appendix B).

Soon after the tenders were received I prepared a memorandum giving my views respecting the establishment of the cable. As these views are strengthened and confirmed by subsequent events, I beg leave to submit this memorandum to the Committee as part of the present statement:—

“*Memorandum.*—Ottawa, 1st December, 1894.—The information obtained since the meeting of the Colonial Conference in July last is of a character to call for special notice. The Conference, by the fifth resolution relating to the Pacific cable, requested the Canadian Government to take the necessary steps to urge forward the undertaking in accordance with the views expressed by the delegates and the resolutions passed by them. On the 10th September a special Commission was appointed by the Canadian Government to proceed to Honolulu, to enter into negotiations with the Hawaiian Government for the possession of a neutral landing-ground for the cable, should it be deemed expedient or desirable to touch at Honolulu or at some other island in the Hawaiian Group. The object was to obtain a choice of routes. While it was the decided feeling of the Conference that the cable should only touch islands on the route in the possession of Great Britain, there were technical as well as commercial reasons for obtaining the use of an island within the Hawaiian archipelago. The report on the mission submitted for the information of His Excellency the Governor-General, 15th November, points out that, while there is a fair prospect of obtaining the use of an island on conditions generally acceptable, the result of the mission remains undetermined, as it awaits the action of the United States Government, owing to a treaty engagement between the two countries. Consequently, as the matter at present stands, there is no alternative line which can be chosen. The route known as No. 1, touching at Fanning Island, is the only route open for adoption. The question of carrying the cable by way of Honolulu or some one of the Hawaiian Islands rests with the Hawaiian Government and the Government of the United States. As soon as the Hawaiian Government feels at liberty to enter into an agreement, such as that suggested during the recent mission, which would secure to them the advantages of telegraphic connection with the markets of the world, it will probably be heard from. Any offer it may make may be considered on its merits before contracts for laying the cable be entered into.”

#### *Tenders.*

On the 6th August an advertisement appeared in the London newspapers asking for tenders. Cable-manufacturing contractors and others were invited by the Canadian Government to state the terms upon which they would be prepared to lay and maintain in efficient condition a submarine electric cable across the Pacific from Canada to Australasia.

Tenders have been received from some of the best and oldest firms; they establish four important desiderata: (1.) They set at rest all questions respecting the practicability of the project. (2.) They establish indisputably that Great Britain can obtain direct telegraphic communication with the British colonies of the Southern Hemisphere, without having resort to any soil not British territory. (3.) They clearly prove that there is no requirement for delay in order to make elaborate preliminary surveys, offers having been received from cable-manufacturers of the widest experience, who, with the information and data possessed, are prepared to lay the cable and guarantee its success. (4.) The tenders give definite information as to the cost of the undertaking; moreover, they furnish proof that the outlay of capital required is less than the amount which has been estimated.

The definite data thus obtained overcome all obstacles which were supposed to stand in the way of the first resolution passed by the Conference—viz., that “immediate steps should be taken to provide telegraphic communication by cable, free from foreign control, between the Dominion of Canada and Australasia.” The Governments concerned are now placed in possession of information essential to the consideration of the best means necessary to the consummation of the project.

As there might be some divergence of opinion as to the best means to be taken to carry out the undertaking, the Canadian Government, in asking for proposals, intimated that offers would be received in three different forms, viz.:—Form A: The cable to be owned and controlled by Government, to be worked under Government authority, and to be kept in repair by the contractor for three years. Form B: The cable to be owned, maintained, and worked by a company under a fixed subsidy for a term of years. Form C: The cable to be owned, maintained, and worked by a company under a Government guarantee of traffic for a term of years.

The only actual offers received are according to Form A. That no offers were received according to Forms B and C may be due to the fact that it was felt desirable to predetermine the maximum charges, so as to preclude a subsidised or traffic-guaranteed Pacific Cable Company amalgamating or combining with the existing company to the disadvantage of the public. It was stipulated that under Forms B and C the maximum rates to be charged on messages to and from Great Britain and the Australasian Colonies shall be 3s. per word for ordinary telegrams, 2s. per word for Government telegrams, and 1s. 6d. for Press telegrams. Trans-Pacific messages to be charged at proportionate rates. These are the rates agreed upon at the Postal and Telegraph Conference held in New Zealand in March last.

My opinion as to the best means of establishing the Pacific cable has been long given, and as early as the Colonial Conference of 1887. I submitted my views again at the recent Colonial Conference, and on occasions before and since that date I have explained the principles which in my humble judgment in view of the public interest should be followed. I do not think it necessary to repeat the arguments I have frequently used in favour of establishing the Pacific cable as a public undertaking, so that it may remain under Government ownership and control. I beg leave to refer to my remarks which the Minister of Trade and Commerce submitted in a memorandum, dated the 11th October, 1893, to the Australasian Governments, likewise to what I said at the Colonial Conference in June last (extracts are appended). On both occasions I pointed out that it would be unwise to subsidise a company, when the object could be attained more economically and far more advantageously to the public by other means. It has since been suggested, as an alternative to a subsidised company (Form B), to establish a company under a Government

traffic guarantee (Form C). That is to say, the company to be guaranteed a gross revenue from traffic for a term of years; the deficiency between actual earnings and the guaranteed earnings to be made good by the Governments each year. To my mind, this plan is scarcely less objectionable than the first mentioned. Let us, by way of illustration, assume that a company is formed under a Government guarantee of gross traffic equal to £200,000 per annum for a period of twenty-five years. What, in this case, would prevent the existing company and the new company entering into a secret pooling agreement by which it would be the policy of both to pass over the old line the great mass of the traffic, the object being to establish against the Governments each year of the twenty-five as large a claim as possible under the guarantee? I do not see that it would be possible to prevent the two companies amalgamating their interest in this or in some other way, and as a consequence a powerful monopoly would be built up to exact its own terms. Looking at the subject in all its bearings, the true plan, in my judgment, is to make the Pacific cable a public undertaking from its first construction. I am satisfied the more the subject is considered it must become clear that only by the observance of the principle of State ownership will the greatest public advantage be permanently obtained. If, in establishing the Pacific cable as a public undertaking, the co-operation of the Mother-country with Canada and the Australasian Colonies be secured, the most advantageous consequences will undoubtedly proceed from this arrangement. The first effect of co-operation would be in connection with the initial cost of the work, as a joint guarantee would admit of the required capital being raised at the lowest possible rate of interest. I have only to point to the Inter-colonial Railway of Canada as an illustration of the advantages attainable. In 1867 it was arranged between the Home Government and the Canadian Government to connect Quebec and Halifax by railway; for this purpose a loan of £3,000,000, bearing the Imperial guarantee, was effected at a low rate of interest, and by this means the Home Government rendered substantial aid in the construction of the National Railway of Canada without in any way drawing on the Imperial Exchequer. It can be clearly established that by the same principle of co-operation in the case of the Pacific-cable undertaking, to which so much importance has been attached as a means of bringing in closer affinity the distant portions of the Empire with the Mother-country, it can be successfully effected without in any way taxing the people of Great Britain, of Canada, or the Australasian Colonies.

Assuming that the principle of co-operation and State ownership be assented to, the capital may be raised by one of three modes, viz.: (1.) The whole amount may be raised by the Canadian, the Australian, and New Zealand Governments, and the interest in each case guaranteed by the Imperial Government; the relative liability to be borne by the Imperial, Canadian, and Australasian Governments, to be apportioned by mutual agreement. (2.) The whole capital may be raised by the Imperial Government; the payment of a sum equal to the interest on such portion of the capital as may be agreed upon, to be guaranteed by Canada and the Australasian Colonies in proportion to be determined. (3.) The capital may be raised on securities issued through the medium of an Imperial Colonial Cable Commission; a joint guarantee for the payment of interest to be given by the Imperial, the Canadian, and the Australasian Governments. It is obvious that by either of these modes the whole of the capital may be obtained at the very lowest rate of interest. The interest would be a first charge against revenue, which it can be shown will be ample for all purposes, but, as it is expedient to provide for every contingency, provision should be made for a deficit. The proportions in which any such possible deficit would be made up by each respective Government would be a matter to be determined by agreement. As several distinct Governments will be concerned in the project, it may be advisable, in order to meet the difficulty of joint ownership, to create an organization in which the administration would be centralised; an Imperial Colonial Cable Commission or trust, established by the authority of the several Parliaments. It might consist of three persons, representing the Imperial, the Canadian, and the Australasian Governments respectively, with authority determined by statutes, to obtain capital, and to assume responsibility for establishing the work and carrying it on when completed.

Among the tenders received is an offer from an old-established and reliable firm to lay the cable on Route No. 1, the all-British route by Fanning Island, for the sum of £1,517,000. This price includes maintenance and repairs for three years after the whole line shall have been completed and put in operation; consequently there would be no disbursements for these services during this period to be met by the earnings of the telegraph. The cost of working and interest on capital would be the only charges against revenue during the first three years after the cable shall have been laid. The cost of working has been estimated by Mr. Alex. Siemens at £24,000 for the operating staff and office expenses at each station. If we add to this 25 per cent. for management, the whole cost of operating would be £30,000 per annum. The interest-charges on the capital expended will depend upon the value the securities may obtain in the money-market. These securities, bearing the guarantee of the Imperial, Canadian, and Australasian Governments, would certainly be rated in no way inferior to Consols. Admitting this view, the rate of interest may be estimated at  $2\frac{1}{2}$  per cent.

Should the most costly of the several routes which have been spoken of be adopted—that is to say, the route by Fanning Island, with branches to New Zealand as well as Australia—I am unable to see with this tender before us, offering to complete it in every respect for £1,517,000, that the capital to be raised need exceed £1,600,000. This capital raised at  $2\frac{1}{2}$  per cent. gives £40,000 as the total interest to be met yearly. As it is advisable in forming an estimate of this kind to make full and complete provision for unforeseen contingencies of whatever kind, 10 or 12 per cent. may be added. In this view £45,000 may be considered the maximum interest-charge, to which, if we added £30,000 for working-expenses, we have the sum of £75,000 as the total fixed charges to be met by revenue in each of the three years after the cable shall have been opened for business.

#### Revenue.

The next question which demands an answer is: What constitutes a fair estimate of revenue? The subject of revenue has been diligently considered in all its bearings, and I have endeavoured to arrive at fair and reasonable estimates: these estimates have been based on carefully collated information respecting the existing telegraph business, which has been steadily and rapidly growing for nearly twenty years. I have submitted the views formed to men of experienced judgment in such matters, and of perfectly unbiassed minds. It is with confidence, therefore, that I refer to those estimates, supported, as they are, by the opinions of gentlemen in high official stations, whose sense of responsibility necessitates the utmost care and caution in arriving at conclusions. Along with my own views on the subject of revenue I have much satisfaction in appending letters referring thereto from the following gentlemen: (1) Mr. George Johnston, Statistician to the Dominion Government, Ottawa; (2) Mr. J. M. Courtney, Deputy Finance Minister, Ottawa; (3) Mr. W. Hepworth Mercer, Colonial Office, London.

The Dominion Statistician, after an examination of the official returns, gives precise information respecting the volume of telegraph business between Australia and Europe; he likewise presents evidence of its rapid growth, of which the following is an indication: 1875, total words transmitted, 235,160; 1875 to 1880, increase in words transmitted, 118,188; 1880 to 1885, increase in words transmitted, 184,007; 1885 to 1890, increase in words transmitted, 289,923; 1890 to 1893, increase in words transmitted, 574,015; 1893, total number of words transmitted, 1,401,293. This officer confirms my statements as to the volume of business, and more than bears out my estimate of the share of traffic which must become tributary to the Pacific cable. It will be seen from the letters of the other gentlemen that, after a careful examination of the data, they fully substantiate, as far as it is possible to do so, the estimates of probable revenue.

In my letter on this subject addressed to the Hon. the Minister of Trade and Commerce of the 20th July, 1894, I have set forth in detail the reasoning which justifies the view I take with respect to the business to be done by the Pacific cable, and I venture to think that the estimates submitted will be considerably within the actual revenue when it comes to be ascertained. According to these estimates the gross earnings in 1893, the first full year that the cable could be in operation, reckoned that the low tariff of 2s. per word would amount to £110,000; for the year 1899, £126,500; and for the year 1900, £143,000. If from these estimated yearly earnings we deduct in each case the fixed charges for interest and working-expenses of £75,000 we would have a surplus in 1898 of £35,000, in 1899 of £51,500, in 1900 of £68,000: showing a total surplus of £154,500 for the first three years the telegraph would be in operation. During the whole of this period the cable would be maintained by the contractor, and any expense

incurred in effecting repairs would form part of the contract sum to be paid to him. After the third year the cost of maintaining the cable would be a charge against surplus earnings, which I shall show would be ample for the purpose, and would, moreover, leave a considerable balance each year to be carried to a reserve fund.

The following table covers the remaining seven of the ten first years after the opening of the telegraph for traffic, and is computed on the principles set forth in the appended papers. The cost of repairs and maintenance, usually estimated at £6 per mile, would amount to £43,000 per annum. For this service I have allowed £50,000, which, added to interest and working-expenses, increases the charge against revenue to £125,000 per annum.

|                                           | Gross Earnings. | Charges | Surplus. |
|-------------------------------------------|-----------------|---------|----------|
|                                           | £               | £       | £        |
| Surplus for the three first years .. .. . | ..              | ..      | 154,000  |
| 1901 .. .. .                              | 159,500         | 125,000 | 34,500   |
| 1902 .. .. .                              | 176,000         | 125,000 | 51,000   |
| 1903 .. .. .                              | 192,500         | 125,000 | 67,500   |
| 1904 .. .. .                              | 209,000         | 125,000 | 84,000   |
| 1905 .. .. .                              | 225,500         | 125,000 | 100,500  |
| 1906 .. .. .                              | 242,000         | 125,000 | 117,000  |
| 1907 .. .. .                              | 258,500         | 125,000 | 133,500  |
| Total surplus in ten years .. .. .        | ..              | ..      | 742,000  |

The estimate shows an increasing surplus year by year which is fully warranted by the data. That a surplus is a probable contingency is due mainly to the assumed low interest on capital; and the low rate of interest, so important a factor in the calculations, presupposes the identification of the Imperial Government with the Governments of Canada and the Australian Colonies in this Imperial-Colonial project. It is scarcely necessary to add that, although there is no probability of loss, or insufficiency of revenue to meet all charges, it is indispensable that the precise responsibility attached to the several Governments which co-jointly undertake the work should be clearly defined. I do not take upon myself to suggest the proportion of liability each may bear, as this must be a matter for diplomatic arrangement hereafter. It has been my object to show by the facts I have presented and the figures I have produced that a mutual effort on the part of Great Britain and the two great divisions of the colonial Empire can establish the Pacific cable with ease, and practically without cost to the taxpayer in either country.

That the estimates I have presented will be borne out by actual results I feel perfectly satisfied. I have based them chiefly on the business which already exists between Australasia and England, and which is year by year increasing with a very rapid growth. I have taken little or no account of the traffic which undoubtedly will spring up across the Pacific when the means of telegraphing at low rates is provided; a new traffic the whole of which will be tributary to the new line. I am satisfied that my estimates are reasonable and reliable: it has certainly been my aim to submit them in a form which time will substantiate and confirm. The first effect of the Pacific cable will be to confer a benefit on the merchants of Great Britain and Australasia, and, indeed, on the whole of that section of the community in both countries who resort to the use of the telegraph. This is obvious from the mere reduction in rates alone. The reduction from 4s. 9d. to 3s. per word will, within the first year after the Pacific cable shall be open, effect a gross saving in Australasia and the Mother-country of £190,000. This saving will be repeated annually, and will continually be augmented by the growth of business. Canada may look for gains of another kind and in another way. As Miss Flora Shaw has recently so well pointed out, Canada "commands the commercial high-road of two hemispheres," and perceiving the value of the position has taken means to secure its possession. But commerce can nowhere be developed without the ordinary facilities, and the telegraph is in this age the indispensable adjunct, and in some notable instances the actual pioneer of commerce. The mere laying of an electric cable between two opposite shores of an ocean has in our time become a comparatively commonplace affair, but to connect Canada with Australasia and New Zealand by telegraph has more than ordinary significance. The contemplated telegraph would greatly strengthen the commercial position of the lands connected by it, and would constitute a common bond between sister colonies now widely separated. In completing the "electric girdle" of the Empire the effect of the trans-Pacific cable would be far-reaching, and its influence would be incalculable. Not the least valuable consequence of the proposal submitted would be its high moral and political import. The co-operation of Great Britain, Canada, and Australasia in establishing this telegraphic connection would present itself to the world as an ideal "co-partnership" unparalleled in history, and it would furnish a striking development of Britannic unity, perhaps foreshadowing still more important developments in coming years.

The questions which the Committee are requested to consider and report their views upon are follows: (1.) Is the laying of a cable between Canada and the Colonies of Australasia practicable from a technical point of view? (2.) If so, what route should be selected for the cable? (3.) What will be the cost (a) of laying, (b) of maintaining the cable, (c) of the annual working-expenses? (4.) What revenue will arise from the traffic which may be expected to pass over the cable? (5.) Should the cable be owned and worked by Government or by a subsidised private company? (6.) If the cable were to be national property, what would be the proper method of management and administration? (7.) What should be the form of contract offered to a contractor for its construction?

I beg leave respectfully to submit the following remarks, having reference to the four first questions. I have already expressed my views on question No. 5 decidedly in favour of Government ownership. I do not presume to offer any opinion on the financial question or the method of administration. (1.) Doubts have been raised as to the possibility of passing messages through the section between Vancouver and Fanning Island on account of its unprecedented length, the distance being 3,240 miles, to which, if sufficient allowance for slack be added, the length of cable required will be about 3,600 miles, a length considerably exceeding that of any cable yet laid. Through the courtesy of Mr. Frederick Ward, manager in England of the Commercial Cable Company, I have had the question tested practically within the past few days. At my request Mr. Ward caused experiments to be tried through two of the main cables of his company. They were looped at Canso (Nova Scotia) so as to form a continuous cable-line from Waterville (Ireland) to Canso and back. The experiments were perfectly successful, messages were passed through the whole length of cable measuring 4,733 nautical miles, fully 1,100 miles greater than the Vancouver-Fanning cable; the result of this trial proves conclusively that there will be no difficulty in connection with the Pacific cable which cannot be overcome. The best possible evidence that the Pacific cable is practicable from a technical point of view is the fact that several of the most eminent cable-manufacturing contractors in the world have offered to furnish the cable, of a given capacity for conveying messages, to lay it on the bed of the ocean, and maintain it in efficient working-condition for three years for a specific sum. (2.) There is only one route open for adoption—viz., that known as the Fanning Island route. There is no immediate prospect of any other route being available. (3.) The lowest tender for manufacturing and laying the cable, on the Fanning Island route, and maintaining it in perfect working-condition for three years, is that of the Indiarubber, Gutta-percha, and Telegraph Works Company. This firm asks £1,517,000 for a twelve-word-per-minute cable, £1,672,000 for a fifteen-word-per-minute cable, and £1,880,000 for an eighteen-word-per-minute cable, maintenance for three years being included in each case (see Appendix B). (4.) The revenue to arise from the traffic which may be expected to pass over the cable would, I firmly believe, exceed the estimates submitted by me. I have estimated that there will be a surplus of £742,000 in the ten first years over and above interest on capital, working-expenses, repairs, and maintenance. The surplus would augment year by year in an increasing ratio, and would be placed in reserve for renewals at some remote period, or would otherwise be dealt with as the Governments may determine.

I have the greatest confidence in the estimates submitted by me, because I believe them to be based on correct data and calculated on sound principles. I have certainly striven to make them moderate, reasonable, and reliable. That the estimates are all that I claim for them, I beg leave to point out has been so far confirmed in a most striking manner. First, with respect to cost: In my letter written at Sydney, New South Wales, 11th October, 1893, and transmitted for the information of each of the Australasian Governments (see Mission to Australia, page 69), I placed the cost of the Fanning Island route at £1,978,000. Tenders for laying the cable on that route were received at Ottawa in November, 1894, and the highest prices in the tender I have mentioned range from £1,517,000 to £1,880,000, and those prices include the cost of maintaining the cable for three years. Second, with respect to traffic: In the same letter of the 11th October, 1893, I estimated that the total number of words which may be expected to be telegraphed between Australasia and Europe would be, in 1894 and 1895, 1,275,191 and 1,453,716 respectively (see page 71). Through the courtesy of the Postmaster-General of New South Wales, I have been placed in possession of the actual number of words transmitted in each of these years—viz., 1,323,241 in 1894, and 1,948,369 in 1895. These authentic returns establish conclusively that the actual business done has exceeded my estimate: that there has been an excess of traffic equal to 4 per cent. in 1894, and no less than 34 per cent. in 1895.

With respect to the proportion of traffic which would fall to the share of the Pacific cable, I beg leave to submit a letter addressed to the Minister of Trade and Commerce, Ottawa, eighteen months ago (28th December, 1894), and I ask that it may be held as part of the statement which I now make: "Referring to our conversation this morning on the subject of the Pacific cable, and more especially on the question of probable revenue, the point which you rightly considered of importance relates to the sources of revenue, and you asked upon what grounds I assumed in my estimates that the Pacific cable would obtain one-half the telegraph business between Australasia and Europe. You suggested as a possibility, from the fact that the existing lines of telegraph had been long established, that there would be business relations between the Eastern Extension Telegraph Company and the owners of the Australasian land-lines, perhaps an understanding or agreement, of such a character as would give the existing cable company exclusive control of European traffic collected throughout the colonies. In answer to this I have only to say that the land telegraphs in each one of the seven Australasian Colonies are owned and operated by the Governments under the Departments of Posts and Telegraphs. There cannot be any agreement of the kind referred to at present existing, and there is no probability of one being entered into. On the contrary, if the Pacific cable be established as proposed, through the co-operation of the Australasian Governments with Canada and Great Britain, the colonies would have a direct interest in the success of the new line, and every telegraph- and post-office throughout Australia and New Zealand would practically become offices or agencies of the Pacific cable. It is easy to be seen, therefore, that there would be a tendency to send European telegraph traffic collected at these offices (unless specially directed otherwise) by way of the Pacific cable in preference to the old route. There can be no doubt whatever that, with the Pacific cable established as proposed on the principle of State ownership, the several Governments at the source of traffic would have it in their power to direct telegraph business over the new line as they may desire. It does not follow that the power in the hands of the Governments would be unduly exercised to the injury of the Eastern Extension Company. No doubt a division of the traffic would for a time diminish the profits of that company, but the establishment of the new route would stimulate telegraphy above its normal growth, and in a very few years the volume of business would be doubled, so that an equal division would restore to that company as much business as it now controls. For these reasons, and the additional reason that the Pacific cable will unquestionably command all the telegraph traffic between North America and Australasia, I feel more than warranted in basing the estimates of revenue on half the European-Australian traffic. I feel quite satisfied that the more the question is looked into my estimates will be found moderate, and considerably on the safe side. For my own part, I feel perfectly assured that, if the cable be laid as a Government work, the estimates of revenue will be borne out by actual results, as fully as estimates of cost have been verified by the tenders received."

In the foregoing letter I have referred to the Eastern Extension Telegraph Company, and pointed out that its business would be diminished by the successful operation of the Pacific cable. The latter, however, would so stimulate telegraphy that in a few years the proportion of traffic which would fall to the share of the existing line would, I have reason to think, equal the volume of business which at present it commands. It is a question for the Governments to consider how far the company may be entitled to claim that its reasonable profits should be made good meanwhile. I have on all occasions recognised that every consideration should be extended to the company whose enterprise established the pioneer cable to Australasia, and first brought the colonies into telegraphic connection with the Mother-country. It is on higher than competitive grounds that a Pacific cable is advocated, and it is impossible to admit that the existence of the Eastern Extension Telegraph must for ever prevent the establishment of a national line across the Pacific. The discussions of the Colonial Conferences of 1887 and 1894 go to show that the Pacific cable is demanded not only by the growing requirements of trade and commerce, but as an essential feature of the development of the telegraphic system of the Empire.

SANDFORD FLEMING.

DOCUMENTS submitted for the Information of the Committee by Mr. SANDFORD FLEMING (8th July, 1896).

1. General conditions under which tenders for laying the Pacific cable were invited—Appendix A. *Not printed.*  
2.\* The tenders received by the Canadian Government and letters connected therewith: (a) Letter from Sir John Pender, 19th October, 1894; (b) letter from Mr. W. Sharpley Seaton, 19th October, 1894; (c) letter from the Chairman, Telegraph Construction and Maintenance Company, 19th October, 1894; (d) letter and tender of Mr. Francis A. Bowen, 20th October, 1894; (e) tender of Siemens Brothers and Co., 20th October, 1894; (f) tender of Fowler-Waring Cable Company, 19th October, 1894; (g) tender of W. T. Henley Telegraph Works Company, 19th October, 1894; (h) tender of Indiarubber, Gutta-percha, and Telegraph Works Company, 19th October, 1894; tender of Indiarubber, Gutta-percha, and Telegraph Works Company, 22nd November, 1894; tender of Indiarubber, Gutta-percha, and Telegraph Works Company, 24th December, 1895.

Appendix B.—3. Report on tenders by Sandford Fleming, 20th November, 1894; additional report on tenders by Sandford Fleming, 11th December, 1894.

Appendix C.—4. State ownership and revenue: (a) Extracts from Mr. Fleming's address, 2nd July, 1894; (b) extracts from Mr. Fleming's memorandum, 11th October, 1893; (c) extracts from Mr. Fleming's letter, 20th July, 1894; (d) letter of George Johnson, Dominion Statistician, Ottawa, 29th November, 1894; (e) letter of J. M. Courtney, Deputy Minister of Finance, Ottawa, 1st December, 1894; (f) letter of W. Hepworth Mercer, Colonial Office, London, 11th October, 1894.

Advertisement.]

APPENDIX A to Mr. FLEMING'S STATEMENT NO. 1.

*The Pacific Cable.*—The Government of Canada invites cable-manufacturing contractors and others to state the terms upon which they will be prepared to lay, and maintain in efficient condition, a submarine electric cable across the Pacific from Canada to the Australasian Colonies. General conditions under which the offers are to be made may be ascertained on application at the Department of Trade and Commerce, in Ottawa, or at the office of the High Commissioner for Canada in London. Offers addressed to the undersigned will be received by him until the 1st November, 1894.—MACKENZIE BOWELL, Minister of Trade and Commerce.—Ottawa, 6th August, 1894.

#### General Conditions.

1. At the Colonial Conference, held in Ottawa between the 28th June and 8th July (inclusive), a series of resolutions was passed relating to the Pacific cable (copies appended). It was resolved, among other things, that immediate steps should be taken to provide direct telegraphic communication between the Dominion of Canada and

\*NOTE.—The tenders and letters under this heading are placed in the custody of the Colonial Office for reference and not for publication. As they were received by the Canadian Government in the first place, they are to be returned when required.

the Australasian Colonies. At the unanimous request of the delegates present at the Conference, the duty of giving effect to the resolutions passed, and the views expressed, devolved upon the Canadian Government.

2. In order to obtain definite data to enable all the Governments concerned to consider and adopt the best means of carrying out the undertaking, the Canadian Government deems it expedient to invite proposals for establishing the cable in three different forms, viz.:—

*Form A* (the cable to be owned and controlled by Government; to be worked under Government authority, and to be kept in repair by the contractor for three years).—Cable-manufacturing contractors to state the lowest cash price for which they will be prepared to supply and lay the cable, the terms and conditions upon which they will guarantee its permanency, and the annual payment for which they will maintain it in efficient condition for three years after the whole line shall have been completed and put in operation.

*Form B* (the cable to be owned, maintained, and worked by a subsidised company).—The contracting parties to find the capital, establish, work, and maintain the cable in efficient condition for a subsidy to be paid to them annually for a term of years by the contributing Governments. The offers to state the amount of subsidy to be paid yearly, and the number of years it is to be paid. The maximum rates to be charged on messages to and from Great Britain and the Australasian Colonies shall be as follows: 3s. per word for ordinary telegrams; 2s. per word for Government telegrams; and 1s. 6d. for Press telegrams. The charges on messages between Canada and the colonies to be proportionate.

*Form C* (the cable to be owned, maintained, and worked by a company under a Government guarantee).—The contracting parties to find the capital, establish, work, and maintain the cable in efficient condition. The offers to state what guarantee of gross revenue will be required; the difference between gross earnings and the amount guaranteed to be made good each year to the company by the contributing Governments. The rates to be charged for the transmission of messages to and from Great Britain and the Australasian Colonies shall be as follows: 3s. per word for ordinary telegrams; 2s. per word for Government telegrams; and 1s. 6d. per word for Press messages. Trans-Pacific messages to be charged at proportionate rates.

The tariff of charges to be approved and not changed unless by governmental sanction.

#### *Route of Cable.*

Offers will be received for laying the cable on each of the routes, described as follows:—

*Route No. 1.*—Commencing at Vancouver Island, the cable to extend to Fanning Island, thence to a suitable island in the Fiji Group. From Fiji to Norfolk Island, and at that point the route will bifurcate to the northern part of New Zealand, and to a convenient point near the boundary between New South Wales and Queensland: Vancouver Island to Fanning Island, 3,232 knots; Fanning Island to Fiji, 1,715 knots; Fiji to Norfolk Island, 1,022 knots; Norfolk Island to New Zealand, 415 knots; Norfolk Island to Tweed Mouth, near boundary New South Wales and Queensland, 761 knots: total, 7,145 knots.

*Route No. 2.*—From Vancouver Island the cable to be laid to a small unoccupied island indicated on the charts as Necker Island, situated about 240 miles westward from the most western island of the Hawaiian Group, and about 400 nautical miles from Honolulu. From Necker Island the cable to extend to Fiji, and thence, as in Route No. 1, to New Zealand and Australia. On the section between Necker and Fiji, possibly Howland or Baker Island may be available for a mid-station, but the exact position has not been ascertained: Vancouver Island to Necker Island, 2,431 knots; Necker Island to Fiji, 2,546 knots; Fiji to Norfolk Island, 1,022 knots; Norfolk Island to New Zealand, 415 knots; Norfolk to Tweed Mouth, 761 knots: total, 7,175 knots.

*Route No. 3.*—As in Route No. 2, the cable to extend from Vancouver Island to Necker Island, thence to Onoatua or some one of the eastern islands of the Gilbert Group. From this station in the Gilbert Group two branches to extend, one to Queensland and the other to New Zealand. The Queensland branch to touch at San Christoval Island in the Solomon Group and terminate at Bowen, connecting at that point with the land-lines, easterly to Brisbane and Sydney, westerly to the Gulf of Carpentaria: Vancouver Island to Necker Island, 2,431 knots; Necker Island to Onoatua (in Gilbert Group), 1,917 knots; Onoatua to Fiji, 980 knots; Viti Levu to New Zealand, 1,004 knots; Onoatua to San Christoval (Solomon Group), 953 knots; San Christoval to Bowen, Queensland, 980 knots: total, 8,265 knots.

*Route No. 4.*—As in Routes Nos. 2 and 3, the cable to be laid from the northern terminal point to Necker Island. From Necker Island to extend in a direct course to Bowen, touching at Apamana, a central island in the Gilbert Group, and at San Christoval, of the Solomon Group: Vancouver Island to Necker Island, 2,431 knots; Necker Island to Apamana (Gilbert Group), 1,865 knots; Apamana to San Christoval (Solomon Group), 970 knots; San Christoval to Bowen, Queensland, 980 knots: total, 6,246 knots.

*Route No. 5.*—As in Routes Nos. 2, 3, and 4, the cable to run from Vancouver Island to Necker Island; from Necker Island to Fiji, thence to Jersey, thence direct to New Zealand: Vancouver Island to Necker Island, 2,431 knots; Necker Island to Fiji, 2,546 knots; Fiji to New Zealand, 1,150 knots: total, 6,127 knots.

*Route No. 6.*—From Vancouver Island the cable to extend to Honolulu; from Honolulu to Fiji, and from Fiji to follow Route No. 1 to New Zealand and Australia. On the section between Honolulu and Fiji one of the Phoenix Islands may possibly be found available for a mid-station: Vancouver Island to Honolulu, 2,280 knots; Honolulu to Fiji, 2,600 knots; Fiji to Norfolk Island, 1,022 knots; Norfolk Island to New Zealand, 415 knots; Norfolk Island to Tweed Mouth, 761 knots: total, 7,078 knots.

*Route No. 7.*—From Vancouver Island the cable to extend to Honolulu; from Honolulu to Onoatua, of the Gilbert Group; from Onoatua to San Christoval, of the Solomon Group; from San Christoval to Bowen: Vancouver Island to Honolulu, 2,280 knots; Honolulu to Onoatua, 2,080 knots; Onoatua to San Christoval, 953 knots; San Christoval to Bowen, 980 knots: total, 6,293 knots.

*Route No. 8.*—From Vancouver Island the cable to extend to Honolulu; from Honolulu to Fiji, possibly with a mid-station on this section if a suitable island be available. From Fiji the cable to run direct to New Zealand: Vancouver Island to Honolulu, 2,280 knots; Honolulu to Fiji, 2,600 knots; Fiji to New Zealand, 1,150 knots: total, 6,030 knots.

The northern terminus of each route is on Vancouver Island. The cable will land at some suitable point to be determined, probably at Port San Juan, near the entrance of the Strait of San Juan, or at Barclay Sound. The several routes above described are shown generally on the accompanying map of the world. The distances given in each case are believed to be approximately correct, but are not guaranteed. Parties offering to provide and lay the cable must make their own calculations of distances and satisfy themselves.

*Character of Cables.*—Proposals will describe the type of cables intended to be used on each section, and state the weight of conductors and insulators per knot in each case.

*Shore Ends.*—The best description of landing cables must be employed at terminal points and all mid-stations. The proposals will describe the character, weight, and length of shore-end cables to be used in each case.

*Speeds.*—The calculated speeds for each section of the cable shall in no case be less than twelve words per minute.

*Stations and Equipments.*—Each offer will describe the character and approximate cost of buildings, instruments, &c., to be furnished for each terminal and mid-ocean station.

*Repairs and Maintenance.*—Proposals will state the provision intended to be made for repairs and maintenance, the number, tonnage, and value of repair steamers. In the case of offers made under Form A, the steamers and stores will be found by and remain the property of the contractor until the end of three years from the completion of the cable, to be then taken over at a valuation, as may be stipulated and agreed.

*Surveys.*—Charts may be seen at the Department of Trade and Commerce, Ottawa, and at the office of the High Commissioner for Canada in London, showing the soundings which have been made from time to time in the Pacific, as far as recorded. It is expected that additional soundings will shortly be made, but parties making proposals must assume all risk; and, in the event of a contract being entered into for establishing the cable, the contractors must themselves take means to find the most suitable points for landing the cable at all terminal and mid-ocean stations. It will be understood that in each instance the landing privileges are to be secured by the contributing Governments.



*Time of Completion.*—The time limited for the completion of the cable is three years from the date of the contract, but, as it is desirable to have telegraphic communication established as soon as practicable, proposals may state a shorter period, or the same parties may make two offers, one on the basis of three years, the other on the shortest period within which the undertaking may be accomplished.

*Proposals.*—Proposals based on the above general conditions, and in either of the three forms set forth, to be addressed to the Minister of Trade and Commerce, and delivered at his department in Ottawa on or before the 1st day of November, 1894.

Department of Trade and Commerce, Ottawa, 6th August, 1894.

4. *Resolved*, That, in view of the desirability of having a choice of routes for a cable-connection between Canada and Australasia, the Home Government be requested to take immediate steps to secure neutral landing-ground on some one of the Hawaiian Islands, in order that the cable may remain permanently under British control.

5. *Resolved*, That the Canadian Government be requested, after the rising of this Conference, to make all necessary inquiries, and generally to take such steps as may be expedient in order to ascertain the cost of the proposed Pacific cable, and promote the establishment of the undertaking in accordance with the views expressed in this Conference.

#### APPENDIX B to Mr. FLEMING'S STATEMENT No. 1.

##### *Report on Tenders.*

SIR,—

Ottawa, 20th November, 1894.

I have the honour to report on the replies received by you on the 1st instant, in response to the public advertisement of the Government of Canada, inviting cable-manufacturing contractors and others to state the terms upon which they would be prepared to lay and maintain in an efficient condition a submarine electric cable across the Pacific from Canada to the Australasian Colonies.

1. Sir John Pender, Chairman of the Eastern Extension Telegraph Company, 50, Old Broad Street, London, addressed a letter to you, dated 19th October, 1894, in which he represented (1) that full information respecting the depth and nature of the sea-bed has not been obtained, and in consequence reliable opinions cannot be formed; (2) that Mr. Alex. Siemens's estimates of revenue are fallacious, and that my own estimates are not much more reliable; (3) that a cable laid as intended would be quite useless and would prove a commercial failure; (4) that a telegraph established across the Pacific as proposed would result in a loss of at least £90,000 a year to the company he represents. Sir John Pender, in short, discourages in every possible way the attempt to span the Pacific by a Canada-Australian telegraph. He states, however, that he will be most happy to enter into negotiations for accomplishing the work if sufficient inducements be offered him, and he pleads that his company "will be able to undertake the work on better terms than could be offered by any other company."

2. Mr. W. Sharpley Seaton, 57½, Old Broad Street, London, likewise addresses you 19th October, 1894. This gentleman sets forth at some length the great necessity which exists for a detailed survey. He considers this to be of primary importance, and counsels delay until such a survey be made.

3. The Chairman of the Telegraph Construction and Maintenance Company, 38, Old Broad Street, London, writes 19th October, 1894. He criticizes generally the proposals which have been published by the Canadian Government, and raises objections to the conditions laid down for intending contractors. He objects to each one of the eight routes specified, and proposes a new route, taking in Honolulu and Samoa. On this route the firm he represents would lay a cable of a good type and weight between Vancouver and New Zealand (only) for £1,870,000. This amount, however, does not include maintenance for three years or for any period; nor does it include a branch cable to Australia. He urges as a first step that the line should be sounded over its entire length on the exact route chosen, and he states that his firm cannot undertake to guarantee the repair of the cable until a further investigation has been made of the sea-bottom over which the cable is to be laid. The writer of this communication estimates that a cable could be laid on Route No. 8 for about £1,300,000, but this, he states, would depend upon its proving possible to find an available and safe mid-station between Honolulu and Fiji. He further states that maintenance on this or any route cannot under present conditions be guaranteed by this firm.

4. Mr. Francis A. Bowen, 3, Tokenham Buildings, King's Arms Yard, London, sends a proposal, dated the 20th October, 1894. This gentleman, for himself and his associates, offers to construct and submerge a cable on any route which may be selected for £200 per knot of 6,082·66 ft. The offer presents itself to me as being in an exceedingly ambiguous form, as there is nothing to show what the total cost may be on any route, and there is no explanation as to how the total cost is to be ascertained, whether the number of knots shall be reckoned on the actual distance between stations, or on the length of cable paid out; nor is it clear that the price stated includes the cost of buildings, instruments, &c., moreover, and to my mind the most serious objection to this offer is the specification of the core to be used; the weight of copper and gutta-percha appears to be designed to be the same throughout without reference to the length of sections to be spanned. As specified the core would be too light for the long section and unnecessarily heavy for the shorter sections. Mr. Bowen places the additional charge for maintenance at £237,000 for the three years.

5. The India-rubber, Gutta-percha, and Telegraph Works Company refer to the invitation for proposals under Form C—that is, on the basis of a traffic guarantee. This company is unable to make a firm offer under this form; they, however, submit an estimate in the following words: "For your guidance we may state that in our opinion a twenty-five years' annual guarantee, payable quarterly, of the following amounts, as placed against the respective routes, should suffice for the effective establishment and maintenance of the cable: Route No. 1, £226,000; Route No. 2, £217,000; Route No. 3, £215,000; Route No. 4, £153,000; Route No. 5, £202,000; Route No. 6, £199,000; Route No. 7, £184,000; Route No. 8, £197,000."

There is no other reference in any of the replies received to the establishment of the trans-Pacific telegraph under a Government traffic guarantee (Form C), and none whatever to the formation of a company to carry out the undertaking under a Government subsidy (Form B).

With respect to the matter of soundings referred to in the first, second, and third communications, above noticed, I would only remark that it would require soundings to be taken in a very comprehensive manner to give even an approach to a full knowledge of the sea-bed, and that it would involve much cost and prolonged delay. However valuable such a survey would undoubtedly prove in a scientific point of view, it is by no means indispensable to the laying of a cable or to its effectual maintenance. Cables have been laid, and successfully laid, when no such comprehensive surveys have been effected; indeed, the best information goes to show that a large proportion of cables at present submerged have been laid without any precise and detailed knowledge of the sea-floor. The majority of such cables are, I believe, in good working-order, and few of them have ever required any great expenditure for repairs. Be all that as it may, the Government is now in possession of definite offers from firms of the highest standing and widest experience to lay the Pacific cable on any one of the eight routes specified. All the soundings required for securely and successfully laying the cable are to be made by the contractors themselves during the time occupied in manufacturing it, and so satisfied are they on this and all other points that they are quite ready to enter into contract to complete the undertaking and guarantee its maintenance for three years for a definite sum.

There are four regular tenders according to Form A, accompanied by ample details and full information on all essential points. After carefully and critically examining and comparing them, I beg leave to submit the following abstract:—

*Regular Tenders.*—Form A. The cable to be owned and controlled by Government; to be worked under Government authority; and to be kept in repair by the contractor for three years: No. 1. From Siemens Brothers and Co., 12, Queen Anne's Gate, Westminster, London. No. 2. From the Fowler-Waring Cable Company, North Woolwich, London. No. 3. From the W. T. Henley Telegraph Works Company, 27, Martin's Lane, Cannon Street, London, and

North Woolwich. No. 4. From the Indiarubber, Gutta-percha, and Telegraph Works Company, 106, Cannon Street, London, and Silvertown. These tenders are based on the general conditions prescribed; they include in each case the manufacture and laying of the cable; the providing of station-buildings and instruments for the use of the operating staff; likewise the maintenance and repair of the entire length of the cable for a period of three years after the whole line shall have been completed and put in operation.

The parties tendering are prepared to enter into contract for the sums placed opposite the name of the firms, in each case, as follows:—

*Route No. 1.*—Commencing at Vancouver Island, with mid-stations at Fanning Island, Fiji, and Norfolk Island, and with branches from Norfolk Island to New Zealand and New South Wales—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,517,000. No. 3. W. T. Henley Telegraph Works Company, £1,826,000. No. 1. Siemens Brothers and Co., £2,170,000. No. 2. Fowler-Waring Cable Company, £2,350,000.

*Route No. 2.*—Commencing at Vancouver Island, with mid-stations at Necker Island, Fiji, and Norfolk Island, and with branches to New Zealand and New South Wales—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,316,000. No. 3. W. T. Henley Telegraph Works Company, £1,743,000. No. 1. Siemens Brothers and Co., £2,140,000. No. 2. Fowler-Waring Cable Company, £2,210,000.

*Route No. 3.*—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Onoatua (Gilbert Group), branching at Onoatua, *via* Fiji, to New Zealand, and *via* San Christoval (Solomon Group) to Bowen—complete in each case, including maintenance for three years: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,403,000. No. 3. W. T. Henley Telegraph Works Company, £1,723,000. No. 1. Siemens Brothers and Co., £2,240,000. No. 2. The Fowler-Waring Cable Company, £2,341,000.

*Route No. 4.*—From Vancouver Island to Bowen (Queensland) direct, with mid-stations at Necker Island, Apamama (Gilbert Group), and San Christoval (Solomon Group)—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,068,000. No. 3. The W. T. Henley Telegraph Works Company, £1,554,000. No. 1. Siemens Brothers and Co., £1,710,000. No. 2. The Fowler-Waring Cable Company, £2,125,000.

*Route No. 5.*—Vancouver Island direct to New Zealand, *via* Necker Island and the Fiji Group—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,291,000. No. 3. W. T. Henley Telegraph Works Company, £1,658,000. No. 2. The Fowler-Waring Cable Company, £2,010,000. No. 1. Siemens Brothers and Co., £2,050,000.

*Route No. 6.*—Vancouver Island to Norfolk Island, with mid-stations at Honolulu and Fiji. At Norfolk Island branches to extend to New Zealand and Australia proper—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,391,000. No. 3. The W. T. Henley Telegraph Works Company, £1,740,000. No. 1. Siemens Brothers and Co., £2,120,000. No. 2. The Fowler-Waring Cable Company, £2,130,000.

*Route No. 7.*—From Vancouver Island to Bowen (Queensland), with mid-stations at Honolulu, Onoatua (Gilbert Group), and San Christoval (Solomon Group)—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,081,000. No. 3. The W. T. Henley Telegraph Works Company, £1,589,000. No. 2. The Fowler-Waring Cable Company, £1,880,000. No. 1. The Siemens Brothers Company, £1,900,000.

*Route No. 8.*—From Vancouver Island direct to New Zealand, with mid-stations at Honolulu and Fiji—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,243,000. No. 3. The W. T. Henley Telegraph Works Company, £1,655,000. No. 2. The Fowler-Waring Cable Company, £1,910,000. No. 1. The Siemens Brothers Company, £1,970,000.

The cost of maintenance is variously estimated by the several firms, the highest being that of the W. T. Henley Telegraph Works Company, who place the cost at £115,000 per annum, or £345,000 for the three years. This is subject to a reduction if the spare cable provided for the purpose be not used. The Siemens Brothers Company include in their offer for the purpose of maintenance £270,000, being at the rate of £90,000 per year; this also is subject to a reduction if the actual repairs cost less than the sum named. This mode of charging for the maintenance and repair of the cable has an obvious advantage. The Fowler-Waring Company stipulate that a fixed sum, £300,000, be allowed to guarantee maintenance and repair for the three years.

The Indiarubber, Gutta-percha, and Telegraph Works Company make no special charge for guaranteeing the maintenance and repairs, and, as their offer for laying the cable on each of the eight routes is the lowest, it is well to make this point perfectly clear by quoting from their proposal as follows: "The contract prices given hereunder for the different routes include the erection at each cable-landing place of a suitable dwellinghouse and operating-room for the working staff, with duplicate sets of all proper instruments at each station; also the use of two steamships fitted with cable-tanks and all necessary machinery for repairing the cable, and the cost of maintaining these ships, as well as the cables themselves, for three years." The contract prices for which this firm is prepared to manufacture, lay, and maintain the cable for three years on any one of the eight routes are as follows: Route No. 1, £1,517,000; Route No. 2, £1,416,000; Route No. 3, £1,303,000; Route No. 4, £1,068,000; Route No. 5, £1,291,000; Route No. 6, £1,391,000; Route No. 7, £1,031,000; Route No. 8, £1,243,000. This company states that if intrusted with the contract they will undertake to manufacture the cable at the rate of twenty miles a day, and will proceed to ship and lay it with the least possible delay. An examination of this tender and accompanying documents shows that this company propose to use an approved type of cable; the core on the long section (Route No. 1) is to have a copper conductor weighing 533 lb. per knot, insulated with gutta-percha weighing 365 lb. per knot, the sheathing to be the same as the deep-sea type of cable adopted by the Anglo-American Telegraph Company in the newest trans-Atlantic cable laid this year. The shore ends and intermediate cables to be similar in character and weight to those generally adopted under like circumstances. There is one apparent omission in this tender in connection with shore-end and shallow-water cables. I can find no special mention of a metallic protection against teredos. In the opinion of the undersigned, the core of the cable should be enveloped in a brass tape. The additional cost is not great, and before any contract is entered into with this or any company it should be clearly stipulated that this effective means of protection against the ravages of marine life should be provided.

The Hon. Mackenzie Bowell, Minister of Trade and Commerce, Ottawa.

I have, &c.,  
SANDFORD FLEMING.

#### *Additional Report on Tenders.*

SIR,—

Ottawa, 11th December, 1894.

I have the honour to report on the letter addressed to you by the Indiarubber, Gutta-percha, and Telegraph Works Company, of date the 22nd November, 1894, on the subject of the tender of that firm for manufacturing, laying, and maintaining the Pacific cable.

In my report on the tenders of date the 20th November, 1894, I mentioned in the last paragraph that in my opinion it was expedient to make provision for protecting the core of the cable, under certain conditions, from the ravages of marine life. The letter of the above-named company which you have referred to me gives the assurance that all types of cable proposed to be laid by that firm will be provided with proper protection—that, in fact, all cables laid in less than 100 fathoms are to have the core sheathed with metallic taping as a protection against the teredo. This assurance removes the objections which I raised.

In my report of the 20th November all the tenders referred to were for the supply of cables having a speed-capacity of twelve words per minute. For Route No. 1 the price of the Indiarubber, Gutta-percha, and Telegraph Works Company is, including maintenance for three years, £1,517,000. In the letter of this company of the 22nd November it is stated that higher speed cables will be furnished for this route at the following prices, viz.: A fifteen-word-per-

minute cable for £1,672,000; an eighteen-word-per-minute cable for £1,880,000. Compared with estimates previously made these prices must be held to be moderate. My own estimate for a cable on this route (No. 1), as given in your report on the mission to Australia (page 69), is £1,978,000; and the estimate furnished the Colonial Office, London, by the General Post Office authorities (see appendix to the same report, page 79) is £2,924,000. Neither of these estimates includes maintenance for three years; moreover, the estimate from the General Post Office does not include a connection with the mainland of Australia, which would probably be estimated at £200,000 additional. We thus have in the tender of the Indiarubber, Gutta-percha, and Telegraph Works Company a definite offer to lay and maintain for three years a cable from Vancouver to Australia and New Zealand with a speed-capacity 50 per cent. higher than the cable referred to by the General Post Office authorities, and for a sum of £1,244,000 less than their estimate without any allowance for maintenance.

Hon. Mackenzie Bowell, Minister of Trade and Commerce.

I have, &c.,

SANDFORD FLEMING.

#### APPENDIX C to Mr. FLEMING'S STATEMENT No. 1.

##### THE PACIFIC CABLE AS A PUBLIC UNDERTAKING OWNED BY GOVERNMENT.

##### (a.) *Extracts from Mr. Fleming's Address at the Colonial Conference, 1894.*

"There are two distinct methods by which the Pacific cable may be established, viz.: (1.) Through the agency of a subsidised company. (2.) Directly by Government as a public work.

"I have given this branch of the subject long and earnest attention, and I have arrived at conclusions which to my mind are confirmed by every day's experience. At one time I favoured the first method. It has been customary to have enterprises of this character carried out by companies, and it seemed to have been assumed that there was no other way by which the work could be accomplished. However, when it is considered that in the United Kingdom, in India, in the Australian Colonies, and in a great many foreign countries the telegraphs are owned and worked by Governments, there appears no good reason why Government ownership should be confined to land-telegraph. No doubt it would give least initial trouble to Governments to offer liberal subsidies in order to have the telegraph across the Pacific laid and owned by a company, but I am perfectly satisfied that in the long-run the second method will be found in every respect more advantageous. The interests of a company and the public interests are not identical; they are in some respects the very opposite. While the primary object of a company is to exact from the public as much profit as possible, the interests of the public, on the other hand, are to secure cheap telegraphy, and to have it as free and untrammelled as possible. Suppose, for example, that a large subsidy be granted, such a subsidy as Sir John Pender has declared to be necessary, and that the whole undertaking passed over to the Eastern Extension Company to carry out, would not the effect be to confirm and perpetuate the telegraphic monopoly which at present exists between Australia and the outer world? Would it not simply shut out all prospect of obtaining the reduced charges to which we may confidently look forward? Would it not contract intercourse instead of providing the fullest opportunity for its free and full expansion, so much to be desired? I look forward to the time—and I do not think it is far distant—when, if a wise and prudent course be followed, the telegraph will ramify in many directions under the ocean to all the principal colonial possessions, and that in the not distant future there will be a greater reduction in charges on messages than has taken place in letter-postage during the past fifty years.

"Speaking for myself, I have arrived at the conclusion that the true principle to follow, looking solely at the public interests, present and prospective, is to establish the Pacific cable as a Government work. In my judgment, it would be a grave and irremediable mistake to give it to the existing company on their own terms, or perhaps on any terms. Even to hand the work over to a new company entirely distinct from the Eastern Extension Company would scarcely mend matters. It would be impossible to prevent the two companies combining in some form to advance their common advantage to the detriment of the public interests.

"I have elsewhere endeavoured to show the advantages derivable from the establishment of the Pacific cable as a public work directly under Government control. It is a matter of constant experience that the promoters of companies, as a rule, set out with the determination to make large sums of money, that investors are promised large returns, and they are not satisfied unless they are forthcoming. In consequence, 9 per cent., and in some cases much more than 9 per cent., is paid for money raised for private companies; while, on the other hand, Governments can borrow capital at 3 per cent. Hence it is possible under Government ownership to reduce charges on telegraphy much below the rates charged by private companies.

"With the proposed cable under Government control, it is not easy to assign a limit to the reduction in charges for transmitting messages, and with low charges there will arise, without any appreciable extra cost in working, a great expansion in the business of the telegraph. Thus the public will be benefited to an extent which would not be possible if the cable became the property or passed under the control of a private company.

"I had hoped to have seen present at this Conference His Excellency Sir Ambrose Shea, Governor of the Bahamas. He would, I am sure, have given the best testimony in favour of the plan of Government ownership. Less than two months ago I had a letter from him in which he furnished indisputable evidence as to the superiority of the principle of Government control. The Bahamas are connected with the mainland by a cable owned by Government. The first idea was to have it carried out by a company under a subsidy of £3,000 a year for twenty-five years. Fortunately it was decided to make it a Government work; the cable is entirely so established, and the policy of its operation is dictated primarily by the commercial requirements of the colonies. Profits are, of course, desired, but these are held to be a subordinate consideration. This policy would have been reversed had the cable been controlled by a company; the interest of the company *per se* would have remained paramount. Sir Ambrose Shea informs me that even in a financial aspect it has proved fortunate that they kept the cable under Government control. Instead of paying £3,000 a year in the form of a subsidy, the charge on the colony is already reduced to £1,800 after fully providing for a sinking fund to cover renewals, as well as interest on the cost and all other charges. Beyond the question of money, the Governor attaches much importance to the power held by the Executive for adapting the policy of the cable management to the growing and varying wants and conditions of the colony.

"It appears to me that, in bringing two of the leading divisions of the colonial Empire into telegraphic connection, we cannot do better than place before us the experiment to which I have referred as having been so successfully tried. Great importance must be attached to the views and ripe judgment of Sir Ambrose Shea, strengthened in a matter of this kind by the experience of the Bahama cables. Every commercial object points to the expediency of retaining the Canada-Australia cable under Government ownership; and, apart altogether from commercial considerations, there is no reason to warrant that so important a work, undertaken for national purposes, should be removed from the effective control of the Governments, by whose authority alone the great principles of its establishment would be fully observed."

##### ESTIMATES OF REVENUE.

##### (b.) *Extract from Mr. Fleming's Memorandum, Sydney, 11th October, 1893.*

"In many cases it is difficult, owing to the lack of information, to form estimates of the probable revenue of a projected undertaking. In this instance, however, the best data are available for our guidance. We have the published statistics of telegraph business by the existing line between Australia and Europe for a number of years, and it is fair to assume that, on the establishment of the Pacific cable, rates and all other things being equal, the business will be equally divided between the two lines. I am unable to ascertain the business for the past year, but I gather from the published returns that the number of words transmitted in the year ending the 1st May, 1892, was 1,275,191. If we divide this into equal parts we have 637,595 words as a basis for estimating the revenue of the Pacific cable.

"In examining the returns for previous years some striking peculiarities are apparent. During the eight years from 1882 to 1890 the telegraph business between the Australian Colonies and Great Britain increased on an average 54,441 words each year, equal to 14 per cent. per annum. This may be viewed as the normal increase under a high tariff, inasmuch as throughout these eight years the charges on ordinary messages were never less than 9s. 4d. per



word. On the 1st May, 1891, the rate was reduced from 9s. 4d. to 4s. per word, and within the twelve following months the business increased by 448,913 words—an increase of 54 per cent. on the business of the previous year, and 831 per cent. over the normal annual increase during the preceding eight years. The further expansion of business will no doubt for the present be disturbed and retarded by an increase in the charges on messages on the 1st January last, but there remains the experience of the year 1891–92 to establish the remarkable effect of a low tariff in stimulating telegraphy. In that single year the increase in the number of words transmitted under a 4s. rate was greater than the growth of the business during the whole of the preceding eight years under a 9s. 4d. rate.

“One of the direct benefits to the public from the Government ownership of the Pacific cable will be the reduction in charges for transmitting messages. I have already mentioned that with a full and efficient staff, such as the estimate for working-expenses provides for, it will cost no more to do a large business than a small. There will therefore be no reason for preventing the freest expansion of telegraphy by the new line by lowering the charges. In my humble opinion, the rates across the Pacific should be lowered to 2s. per word immediately on the cable being laid, in order that the public may have the advantage of cheaper communication at the earliest moment.

“The proposed rate of 2s. per word for transmitting messages across the Pacific would reduce charges between Australia and England to 3s. 3d. in place of 4s. 9d. as at present. Moreover, messages from Australia received at Vancouver would be forwarded to all parts of Canada and the United States for an average charge not exceeding 2s. 9d. per word in place of 6s., the present charge. I wish to avoid extravagant statements and too sanguine estimates. I would, in submitting my ideas, particularly desire to keep strictly within reasonable probabilities. If we base estimates on the existing volume of business merely we must anticipate that there will be no great advance over the business of 1891–92 for a few years if the charges on messages are again raised as they already have been to some extent. In the calculations which follow I shall, therefore, assume the business to be at a standstill for three years—that is to say, I shall assume that the business in 1894 will not be greater in volume than it was in 1891–92, and that thenceforth the normal increase of not more than 14 per cent. per annum shall apply. The number of words transmitted in 1891–92 was 1,275,191. It is assumed that the Pacific cable would, if in operation in 1894, obtain one-half of this business.\*

| Year.        | Number of Words per Annum. | Earnings of the Cable at 2s. per Word. | Year.        | Number of Words per Annum. | Earnings of the Cable at 2s. per Word. |
|--------------|----------------------------|----------------------------------------|--------------|----------------------------|----------------------------------------|
|              |                            | £                                      |              |                            | £                                      |
| 1894 .. .. . | 637,595                    | 63,759                                 | 1900 .. .. . | 1,173,176                  | 117,318                                |
| 1895 .. .. . | 726,858                    | 72,686                                 | 1901 .. .. . | 1,262,439                  | 126,244                                |
| 1896 .. .. . | 816,122                    | 81,612                                 | 1902 .. .. . | 1,351,703                  | 135,170                                |
| 1897 .. .. . | 905,386                    | 90,539                                 | 1903 .. .. . | 1,440,967                  | 144,097                                |
| 1898 .. .. . | 994,649                    | 99,465                                 | 1904 .. .. . | 1,530,230                  | 153,023                                |
| 1899 .. .. . | 1,084,913                  | 108,391                                |              |                            |                                        |

“In connection with the estimates of revenue I have pointed out from statistical returns two elements of increase of business—(1) a normal increase under an exceedingly high tariff; (2) a very much greater increase under a lower tariff. There will be a third increase which will be due to the development of traffic with Canada and in bringing the Australian Colonies into direct telegraphic touch with the whole telegraph system of North America. At present telegraphic intercourse is insignificant, but, with a 2s. or 2s. 6d. rate across the Pacific in place of a 6s. rate by a circuitous route, the circumstances will be favourable to the growth of telegraph business between the two continents, and in consequence the revenue to the Pacific cable from this source will rapidly develop to large proportions. In the foregoing estimates of revenue I have reckoned only the normal increase under a high tariff, and take no account of the greater increase which certainly will result from the charges being lowered, as proposed. I have likewise added nothing from the Australasia-North American business, the whole of which would flow to the Pacific cable. I am quite warranted, therefore, in expressing the opinion that the estimates of revenue I have presented are not exaggerated or unreasonable, and that the Pacific cable established by Government in the manner proposed would effect very important results. It would practically extinguish all subsidies now paid and render guarantees unnecessary. It would permanently establish low rates for ocean telegraphy. It would yield a revenue which, after paying working-expenses, and providing for maintenance and renewals, would make good all interest-charges on the whole cost of the undertaking from the beginning, and in a very few years would furnish large surplus earnings. I venture to think, then, that if the resolution passed by the Postal and Telegraph Conference in March last be generally assented to in these colonies the Governments need not hesitate in incurring the comparatively small, almost nominal, liability necessary to secure a telegraph-connection across the Pacific, which every British subject will recognise to be of the greatest national and commercial value.”

(c.) *Extract from Mr. Fleming's Letter to the Hon. Mackenzie Bowell, 20th July, 1894.*

“With respect to the revenue: If it will take three years to establish the cable, 1898 will be the first year of its full operation. On pages 70 and 71 of the report on the mission to Australia will be found an estimate of the proportion of business which would fall to the share of the Pacific cable for that year, 1898. The estimate was made a year ago and based on the assumed telegraphic business for 1893 between Australia and Europe, which has been exceeded by actual results. (See foot-note p. 71.) Correcting the estimate in this respect, the business for 1898 may be set down at 1,105,000 words, which reckoned at 2s. a word would yield a gross revenue for the first year's operation of the Pacific cable of £110,000. It will be borne in mind, moreover, that this estimate is for European business, and includes nothing for the business between Canada, the United States, and Australia, at present insignificant, but which in a few years, with greatly improved facilities, will undoubtedly develop to considerable proportions. For these reasons I am satisfied that the estimates submitted will be fully realised and more than confirmed by actual results.

“Bearing on these estimates, a friend wrote me from London a few weeks back as follows: ‘I have been looking over the proceedings of the Colonial Conference of 1887, where a memorandum of yours is given, dated April, 1886 (page 101). In it you show a probable traffic for the year 1893 of 133,000 messages, equal to 1,333,000 words. The actual business for the past year, according to Sir John Pender, was 1,306,716 words, and according to Australian returns, 1,401,292 words. In either case the prediction made eight years ago is approximately correct.’ I mention this merely to bring out the fact that the principles on which the estimates are formed are sound, and that the estimates themselves may generally be considered safe.

“With respect to the charges on revenue, viz.: (1) Interest on capital; (2) working staff and management; (3) repairs and maintenance. The first and second are constant, the third is variable. Experience goes to show that failure and interruptions in cables, due to defects in manufacture or causes connected with laying, generally take place within the first year or two. For this and other reasons I propose that the manufacturers should be asked to undertake to keep the cable in efficient working-order for three years; we may thus eliminate from revenue account for that period all charges for repairs and maintenance.

\* At the date of going to press (May, 1894) it has been ascertained that the traffic for 1893 between Europe and Australia consisted of 1,306,716 words, showing that Mr. Fleming's estimate is considerably within actual results. If merely the normal increase of 14 per cent. under a high tariff be added to existing business the number of words for 1894 in the table of estimated earnings which follows should be 744,828 in place of 637,595, and the earnings for the same year £74,483 in place of £63,759. Thus establishing that the estimates of revenue presented in this memorandum are in no way exaggerated.

"Assuming that the cost of the cable and its maintenance for three years will be, in round figures, £2,000,000' the revenue account for the year 1898 would stand as follows: Earnings as estimated, £110,000; interest on £2,000,000 at 3 per cent., £60,000; staff and management, £30,000: surplus revenue, £20,000.

"In the above I have taken Mr. Siemens's estimate of the cost of staff required for stations, and office expenses at each point—viz., £24,000. I have increased Mr. Siemens's allowance for general management to £6,000, the two making in all £30,000 per annum. This charge will be constant, and will suffice, as pointed out by Mr. Siemens, for a business more than six times greater than that estimated for the year 1898, and by introducing duplex working, for a traffic ten or twelve times greater.

"I have pointed out elsewhere that the average normal increase of telegraph business between the Australasian Colonies and Europe was 14 per cent. per annum during the period when the high rates charged for a period of eight years were in force—that is to say, under a tariff rate of 9s. 4d. per word from 1882 to 1890. Manifestly under the low rates proposed to be charged by the Pacific cable the normal increase will be greater than 14 per cent. per annum, more especially as the whole North American business will receive a great incentive from direct communication, and all this additional and constantly growing traffic must find its way by the Pacific cable to and from Australia. I venture to think that it would not be too sanguine an estimate to place the annual increase of business at 18 or 20 per cent., but to be perfectly safe I shall limit it to 15 per cent. in the calculations which follow—that is to say, only 1 per cent. more than the average annual increase realised under the high tariff for the eight years previous to 1890.

"Estimate of the business of the Pacific cable for ten years after its completion, calculated on the basis of 1,100,000 words for the year 1898, an average normal increase of 15 per cent. per annum thereafter:—

|      |    |    | Gross Earnings. | Interest and Working-expenses. | Surplus. |      |    |    | Gross Earnings. | Interest and Working-expenses. | Surplus. |
|------|----|----|-----------------|--------------------------------|----------|------|----|----|-----------------|--------------------------------|----------|
|      |    |    | £               | £                              | £        |      |    |    | £               | £                              | £        |
| 1898 | .. | .. | 110,000         | 90,000                         | 20,000   | 1903 | .. | .. | 192,500         | 90,000                         | 102,500  |
| 1899 | .. | .. | 126,500         | 90,000                         | 36,500   | 1904 | .. | .. | 209,000         | 90,000                         | 119,000  |
| 1900 | .. | .. | 143,000         | 90,000                         | 53,000   | 1905 | .. | .. | 225,000         | 90,000                         | 135,000  |
| 1901 | .. | .. | 159,500         | 90,000                         | 69,500   | 1906 | .. | .. | 242,000         | 90,000                         | 152,000  |
| 1902 | .. | .. | 176,000         | 90,000                         | 86,000   | 1907 | .. | .. | 258,500         | 90,000                         | 168,500  |

"As we have eliminated all but the fixed charges on revenue for the first three years, an examination of the above table will show that the surplus up to the fourth year will have accumulated to £103,500, which sum, together with the annually increasing surplus thereafter accruing, would be sufficient to meet all charges for repairs and maintenance, and leave a balance to be carried to a cumulative reserve for renewals at some future day. I may mention that I have submitted in outline this financial scheme to the delegates from New South Wales, Victoria, Queensland, and New Zealand, with whom I have had the advantage of frequent consultations since the Conference rose, and I have the satisfaction to state that it finds favour with each of them. That feature of the scheme by which all the uncertain charges for repairs and maintenance would be embraced in the contract with the manufactures of the cable would not only have a tendency to secure a cable of the very best make and character, but it would defer all charges against revenue, which revenue could not fully meet, until a date later than the payment of the last annual subsidy to the Eastern Extension Company. The Australian Governments now contributing to that subsidy could then with greater ease make up any possible shortage which may arise in connection with the new cable. The estimate, however, shows clearly that under this scheme there is every prospect of the Pacific cable being self-sustaining from the first."

(d.) Letter from George Johnson, Esq., Dominion Statistician.

DEAR SIR,— Office of the Statistician, Ottawa, 29th November, 1894.  
I have examined your statements before the Intercolonial Conference *in re* the Pacific cable, and have the following remarks to make: First, respecting the growth of business; and, second, respecting the proportion the new route could hope to secure.

(1.) Taking the statistics of growth, I find the following:—

| Year.        | Number of Words transmitted. | Increase. |                       |                   | Tariff per Word. |
|--------------|------------------------------|-----------|-----------------------|-------------------|------------------|
|              |                              | Actual.   | Per Cent. for Period. | Per Cent. Yearly. |                  |
| 1875 .. .. . | 235,160                      | ..        | ..                    | ..                | ..               |
| 1880 .. .. . | 353,348                      | 118,188   | 50                    | 10·0              | 9s. 4d.          |
| 1885 .. .. . | 537,355                      | 184,007   | 55                    | 11·0              | 9s. 4d.          |
| 1890 .. .. . | 827,278                      | 289,923   | 54                    | 10·8              | 9s. 4d.          |
| 1891 .. .. . | 1,275,191                    | ..        | ..                    | 54·0              | 9s. 4d. and 4s.  |
| 1892 .. .. . | 1,321,412                    | ..        | ..                    | 3·6               | 4s.              |
| 1893 .. .. . | 1,401,293                    | ..        | ..                    | 6·0               | 4s. 9d.          |

The actual increase in the three years 1891-93 over 1890 was 574,015. The number of words transmitted is taken from returns submitted to the Postal and Telegraph Conferences held in Adelaide in May, 1890, in Queensland in March, 1893, and in New Zealand in March, 1894. They show that during fifteen years (1875-90) of high tariff (9s. 4d. per word) the increase in the number of words was 251·8 per cent., and that during the three years 1891-93, in which period the rates were reduced to 4s. and 4s. 9d., the increase over 1890 was 69·2. For the whole period covered by these statistics the increase is 496 per cent. From these figures of percentage it appears: First, that during the period 1875-90 the growth of business under a 9s. 4d. tariff was equal to an annual average of 16·8 per cent.; second, that under a 4s. and 4s. 9d. tariff the average annual growth from 1890 to 1893 (three years) was 23 per cent. Your estimate of 14 per cent. increase appears, in the light of these facts, to be a very conservative one.

(2.) How much of the business could a cable competing with the existing one hope to secure?

(a.) A telegram from Melbourne to London by the existing line has to travel 13,695 miles of wire, of which 2,704 miles is in Australia, and is therefore land-wire. The land-wire in Asia is, I judge, about 1,000 miles more of wire. A telegram from Melbourne to London *via* Canada would travel 14,414 miles, of which 3,764 would be land-wire. In respect to the greater danger of stoppage and delay from land-wire, the two lines would be practically on an equality.

(b.) Your estimate is that one-half of the words sent by cable between Australia and the rest of the world would be sent *via* the line across Canada.

According to the return of 1892 there would be, on this estimate, 660,706. But some portion of the total of 1,321,412 words must be Asiatic business, since Australia imports of tea alone 33,000,000 lb. a year direct from Asia. From various data I estimate the Asiatic business at one-eleventh of the whole. Deducting this, we have 1,191,000 words to represent European business, of which the new proposed route would stand a fair chance to secure one-half. I would therefore place the estimate at 595,000 (or 600,000) words instead of 637,595. Taking this estimate and

applying to it the 16·8 per cent. increase, the estimate for 1895 would be 695,000 words, or 31,860 less than your estimate. For 1896 it would be 811,760 words, or 4,362 less. In 1897 it would be 948,000 words, or 42,000 more than your estimate. My calculation would give fewer words for 1895 and 1896 and more words for 1897, and still more in succeeding years. I have taken the percentage of the period when the tariff was 9s. 4d. per word. If the percentage under a 4s. tariff were taken the growth would be much greater, and undoubtedly the result of a reduction in the rates would be an increase in messages, as the table above given shows. I have not dealt with the development of business between North America and Australia, which must in the nature of things be very great when facilities are provided, and will also be tributary to the Pacific cable.

Sandford Fleming, Esq., C.M.G., C.E., Ottawa, Ontario.

Yours, &c.,

GEORGE JOHNSON, Statistician.

(e.) Letter from J. M. Courtney, Esq., Deputy Minister of Finance.

DEAR MR. FLEMING,—

Department of Finance, Ottawa, 1st December, 1894.

I have read over very carefully and, I may say, with the greatest of pleasure the blue-books and documents you left with me for perusal in connection with the scheme for laying a Pacific cable to connect this country and Australasia. Both from the fact that it is the pioneer Pacific-cable scheme, and also from the magnitude of the work itself, the consideration of the subject is to me exceedingly interesting, especially as it has such an intimate bearing on the expansion of the Empire. In writing to you now, however, I wish to be very careful and to guard the position I take from misconception. I can, of course, have nothing to do with the policy of the Canadian Government, and in the present financial condition of the continent I could not, if the matter were referred to me on general principles, recommend any scheme that would increase the liabilities of the Dominion, either directly or indirectly. From the examination of the facts and figures, however, submitted by you, I may say I have arrived at the same conclusion as yourself as to the cost of laying down the cable, and, in my judgment, the conclusion arrived at cannot be regarded as oversanguine or forced in any way. As to the calculations of revenue, I have, of course, taken your own method, and have divided by two the number of words sent in 1892, taking one-half to come over the new cable. But, as it appears from the documents submitted, the cable could not be in operation for three years yet, or until 1898, even if commenced at once, and taking the average annual increase in the messages at 15 per cent., the estimate of the work to be done is, to my mind, very low. It would follow, therefore, judging by the expenditure and by the revenue, that, as far as I can see, with the limited knowledge at my disposal in the matter, and under the conditions named, the cable-line could be laid down and a revenue derived which would meet all the charges. Of course, in all this it must be understood that I am looking at the financial features of the scheme from the documents before me, and that I have no personal or direct knowledge of the laying or working of cable-lines. I do not know that a separate line may not be necessary or that other contingencies may not arise which I have no means of anticipating or foreseeing.

Sandford Fleming, Esq., Ottawa.

Yours, &c.,

J. M. COURTNEY.

(f.) Letter from W. Hepworth Mercer, Esq., Colonial Office, London.

DEAR MR. SANFORD FLEMING,—

Rideau Club, Ottawa, 11th October, 1894.

Before leaving Ottawa I desire to congratulate you on the evidence which is now in the possession of the Canadian Government that your views as to the cost of laying the proposed Pacific cable were moderate and reasonable. It must be a matter of great gratification to you to find, after so many years of controversy and opposition, that your estimates are more than borne out by the practical offers now received.

With regard to the question of the prospective revenue of the cable, I have carefully examined the data and studied the principles upon which you have formulated the estimates contained in your memorandum dated Sydney, 11th October, 1893, and your letter to Mr. Bowell of the 20th July, 1894, and I have satisfied myself that your conclusions are thoroughly sound. Assuming that the cable is to be a Government enterprise, participated in by Great Britain, Canada, and Australasia, I think that the estimates of revenue would at least be fully borne out by actual results. It seems to me that there is now an excellent case for presentation to the various parties interested, and the Australasian Colonies in particular will no doubt look forward to the accomplishment of an enterprise which will, we may fairly hope, give them an unprecedentedly low telegraphic tariff in return for a smaller expenditure than they have been paying for a comparatively high one. I hope, speaking for myself, that in a matter of such wide concern, and involving, besides the direct commercial benefits, results the importance of which cannot be estimated in figures or weighed in a balance-sheet, the Australasian, the Dominion, and the Imperial Governments will be all able to join in the project.

I am, &c.,

W. HEPWORTH MERCER.

STATEMENT No. 2 (REFERRED TO IN THE REPORT OF MR. FLEMING TO THE MINISTER OF TRADE AND COMMERCE, 30TH JANUARY, 1897).

#### NOTE ON THE PACIFIC CABLE.

London, 16th December, 1896.

On the 12th November last I submitted my views on the subject of the Pacific cable. They were mainly comprised in a statement which I had prepared for the information of the Committee in July last. I feel it my duty now to submit some explanation which appears to be called for.

In the evidence received by the Committee since the 12th ultimo there is a general unanimity of opinion on the following points:—First: That the Fanning Island route cannot be widely departed from. It is true that Admiral Wharton mentioned Palmyra Island as a possible mid-ocean station in place of Fanning Island, but the two islands are relatively not far apart. As no special knowledge exists as to the suitability of Palmyra for cable purposes, and nothing could be gained in respect to distance from Vancouver, for the present at least it may be considered that the route to be followed by the cable is that already known as the Fanning Island route. Second: That the laying of a cable between Canada and the Australasian Colonies on the general route referred to is perfectly practicable from a technical point of view. Third: That there is a general agreement on the question of a survey, the gentlemen examined having generally expressed the opinion that a series of soundings is necessary. It is conceded, however, by every one that all soundings required can easily be made during the period occupied in manufacturing the cable.

With respect to the ownership of the cable, whether it should be owned and worked under Government or by a subsidised company, there does not appear to be any great difference of opinion. Some of the witnesses spoke strongly in favour of Government ownership. It is true that gentlemen who appeared on behalf of the Eastern Extension Telegraph Company objected very decidedly to any cable across the Pacific, whether owned or worked by Government or by a subsidised company. They took the ground that it would be unfair to the Eastern Extension Company to establish a competing line without compensation to that company for loss of business and loss of profit. Several questions were asked me on this point, to which I deferred giving replies. I felt that whatever claims the present company might have on the Imperial Government and the Australian Colonies which had not already been met, that company could have no possible claim on Canada, as the Dominion is not, and never has been, under the slightest obligation to the Eastern Extension Telegraph Company. It may indeed be held that the company has always assumed an attitude of hostility to the aspirations of Canada in respect to the proposed cable, and has for years strenuously opposed all efforts to advance her own and Imperial interests on the Pacific in connection with the union of Australasia and British North America telegraphically. Be that as it may, I can only repeat the view I have often expressed, that if the exigencies of the Empire as a whole demand the establishment of a national work which will interfere with the operations of this private company, every reasonable consideration should be extended to that company by those upon whom it has just claims. But it cannot be supposed that the public interests must be entirely set aside in order that the company may for ever continue to receive large dividends. I will again refer

o the position of the Eastern Extension Company, and suggest a means by which, as it appears to me, the matter can be adjusted in the spirit of justice and fairness.

I have pointed out in what respect there is a general agreement in the views expressed by the several gentlemen examined by the Committee. I shall now refer to an extraordinary diversity of opinion. In this diversity I find ranged on one side the agents of the Eastern Extension Telegraph Company, and two officers of the Post Office Department. On the other side all the highest authorities on electrical science, together with the managers of two important ocean cables, whose evidence was submitted to the Committee. The two officers were Mr. J. C. Lamb, Secretary, and Mr. W. H. Preece, Engineer-in-Chief and Electrician to the General Post Office, London. Their evidence in the main agrees with that of the gentlemen who appeared on behalf of the Eastern Extension Telegraph Company, whose views are adverse to the establishment of the proposed Pacific cable.

The antagonistic evidence is voluminous; if examined it will be seen that the gentlemen who submitted it are substantially of one mind on many subjects. The tone and substance of their observations leaves the impression that they do not look upon the Pacific cable as a necessary or desirable undertaking, and that if established as designed it would be inadequate in capacity and a heavy burden on the public exchequer. I could not venture to take up the time necessary to refute the whole evidence. I will, however, give an illustration. The views of Mr. Preece are, perhaps, the least extreme and the least adverse to the project. Let me direct attention to the replies of that gentleman to question 1365 and following questions. He refers in his replies to a cable which, on the long section between Vancouver and Fanning Island, would consist of 552 lb. of copper and 368 lb. of gutta-percha per knot. The limit of the capacity of this cable would be (he says) three words per minute, that you cannot take a longer working period than ten hours a day and three hundred days in a year. "The result is" (reply to question 1366) "that you cannot calculate on transmitting more than 540,000 words between England and Australasia by means of this cable" in the twelve months. If we turn to other gentlemen who have no connection with the Post Office or the Eastern Extension Telegraph Company, but who are skilled and practical electricians of admitted authority, we find testimony of a very different character. The Messrs. Gray, of the Silvertown Company, state that the cable referred to (552 lb. copper, 368 lb. gutta-percha per knot) would carry fully twelve words per minute, the standard word consisting of five letters. Lord Kelvin confirms this statement. Mr. Alexander Siemens says that the cable proposed by his firm, although somewhat lighter (500 lb. copper, 320 lb. gutta-percha), would in practice give fifteen words per minute. Dr. Alexander Muirhead, the recognised authority on all such matters, states that the cable proposed by Lord Kelvin, and accepted by the Silvertown Company, would give a speed of eighty letters, or sixteen words, a minute simplex, and that by employing the duplex system with automatic transmitting apparatus 90 per cent. more work could be done with perfect ease. That is to say, the cable which the Indianrubber, Gutta-percha, and Telegraph Works Company tendered to the Canadian Government to manufacture, lay, and maintain in working-order for three years, for the total sum of £1,517,000, would be capable of transmitting 152 letters, or over thirty standard words, per minute. The managers of the Anglo-American Telegraph Company and of the Commercial Cable Company each testified that their offices are always open, that there is nothing to prevent them transmitting messages in a continual stream for twenty-four hours a day, and that they saw no reason why the same course should not be followed on the Pacific cable. If, then, taking eighteen business words a minute in place of thirty standard words, we will find that it would be possible to transmit in a year, reckoning twenty-four hours a day and three hundred days in a year, a total volume of 7,776,000 words in place of 540,000 words, the maximum limit given by Mr. Preece, of the Post Office Department.

I am afraid I am unable to congratulate the officers of the General Post Office—at least, those whom it has been my fortune to meet—on the soundness of their estimates or the accuracy of their statements. In the report on the mission to Australia by the Canadian Minister of Trade and Commerce I find at page 76 a reference to a letter addressed to the Colonial Office by Mr. J. C. Lamb, of the General Post Office, London (dated the 5th July, 1893). I beg leave to refer to the whole letter, and I ask permission to quote one paragraph: "On the Vancouver-Fanning section he (the Engineer-in-Chief of the department) is of opinion that to secure even the moderate working-speed of twelve words a minute the cable must have a core of 940 lb. of copper and 940 lb. of gutta-percha to the knot; and the cost of manufacturing and laying such a cable would probably be about £600 per knot, or, say, £2,374,000. The total cost of the whole line from Vancouver to New Zealand would thus be about £2,924,100." This letter was first seen by me in Australia a few weeks after it was written. I have reason to remember the effect it produced when such estimate, coming from such authority, confronted the Canadian delegate on the first week of his arrival in the colonies. I have still further reason to remember the letter, as it had much to do with a journey on my part from Australia to London to inquire into the accuracy of the statements it contains. As the result of my inquiry, I ask permission to direct attention to page 76 of the report on the mission to Australia, and my letter therein contained (dated the 6th February, 1894).

The year following Mr. Lamb's letter of July, 1893, the Canadian Government received tenders for establishing the Pacific cable with precisely the same working-speed as that mentioned by Mr. Lamb—viz., "twelve words a minute." I am aware that during the recent examination a new issue has been raised as to the number of letters in a word, but it cannot be denied that when Mr. Lamb's letter was written a "word" was a conventional term agreed upon by the cable world, and was understood by every one to mean an average word of five letters. Clearly, then, it may be assumed that if Mr. Lamb or Mr. Preece wished to be understood differently they would have stated that they did not mean the common standard word of five letters, but some other word containing a different number of letters.

The tenders received by the Canadian Government embraced more than the estimate contained in Mr. Lamb's letter. In order to make a comparison, therefore, it becomes necessary to add to the estimate what it did not contain—viz., the cost of a cable from New Zealand to Australia, and the maintenance of the whole work from Vancouver to Australasia for three years. The data for these additions is furnished in Mr. Lamb's letter and in the recent evidence of Mr. Preece: (1) Estimate in Mr. Lamb's letter of the cost of a cable between Vancouver and New Zealand, £2,924,100; (2) cable from New Zealand to Australia, 1,066 knots at £150 per knot, £159,900; (3) maintenance for three years, minimum estimate by Mr. Preece, £180,000; total, £3,264,000. We have thus presented to us the estimate of the officers of the Post Office Department, amounting in all to £3,264,000. The Canadian Government has a *bonâ fide* tender to carry out in a complete and satisfactory manner precisely the same work for £1,517,000.

What can be said of such a discrepancy as this? I entertain no doubt as to the great ability, the varied information, and the value of the services of these gentlemen. I can only regret that in my extremely limited knowledge of them I should be so unfortunate as to be driven to the conclusion that, however important the offices they fill, their importance does not make the occupants of the office infallible. In short, I am constrained to form the opinion that they have made a grave mistake, and that to this mistake, and to the unfortunate letter of Mr. Lamb in which it is contained, may be traced the seeming antagonism to a Pacific cable which will be found in the evidence recently submitted. But the tendency to error in matters appertaining to the Pacific cable on the part of officers of the Post Office, I regret to say, is not new. I can recall to my memory the immediate predecessor of Mr. Lamb. He was introduced to the Colonial Conference of 1887 by the Postmaster-General in these words: "I have been fortunate enough to secure the attendance here to-day of my friend Mr. Patey, who is the Secretary of the Post Office, who is specially charged with the telegraphic department, and than whom I suppose no greater authority upon telegraph matters exists. He will be most happy to place his knowledge at the disposal of the Conference, to answer any questions, and take part in any discussion which may arise upon any particular point concerning the telegraph-service of the Empire." Almost the first statement made by this Post Office officer had reference to the depth of the ocean between Australasia and Vancouver. He said: "I think in one or two cases the depth goes down to 11,000 or 12,000 fathoms." After some discussion, in which it was pointed out that the greatest known depth upon the route of the Pacific cable was 3,200 fathoms, the Secretary of the Post Office was again asked the question, "Did we understand you to say 12,000 fathoms?" His answer was, "Yes; 12,000 fathoms." I need scarcely remark that no such ocean depth as 12,000 fathoms is known anywhere, and I refer to these matters simply with a view of showing that, without any intention to mislead, the statements and estimates of these officers concerning cable matters at least are highly misleading, and must be received with caution.

Reverting to the letter of Mr. Lamb (5th July, 1893), there can be no doubt whatever that a grave error was made by the officers of the department. A mistaken estimate was undoubtedly arrived at by them: I do not say with any design. I am bound to assume with good intention. Nevertheless, all the evidence from the best authorities, likewise from actual tenders, prove it to have been a mistake calculated to mislead, and I humbly think it would have been better and more dignified had both Mr. Preece and Mr. Lamb acknowledged the mistake in their present evidence, and not attempted to defend it. It is true their views are in accord with those of the Eastern Extension Company, whose antagonism to the Pacific cable is at least comprehensible. They now find themselves, however, in contradiction to the highest electrical authorities, to the most experienced cable managers, and to all those who, in the interests of the colonies and the Empire, are striving to establish a national line of communication between the great distant colonies and the Mother-country; I may add to the head of their own department, for Mr. Lamb frankly stated, in reply to question 3083, that the views he expressed were not the views of the Postmaster-General.

Taking exception, then, to the views of the agents of the Eastern Extension Telegraph Company, and of the two Post Office authorities referred to, we have other evidence of the highest value to fall back upon, and on which implicit reliance can be placed. Lord Kelvin, Dr. Muirhead, and Messrs. Gray and Siemens, electricians, together with Messrs. Carson and Ward, the managers of two important trans-Atlantic cable companies, are each and all clearly of opinion that the proposed Pacific cable would have sufficient speed-capacity to transmit full sixty letters per minute simplex; and employing the duplex system now almost universally applied, together with the more recently introduced automatic transmitting apparatus, it would be quite possible to transmit telegraphic business continuously at the rate of 114 letters per minute. With each message transmitted there are certain letters sent which are free—or, rather, that the telegraphing public do not pay for—and there are certain service messages which likewise do not pay. These non-paying letters and words, according to Mr. Carson, manager of the Anglo-American Telegraph Company, do not exceed 15 per cent. of the whole matter transmitted. Mr. Ward, manager of the Commercial Cable Company, places the non-paying matter at 16 per cent.; 84 to 85 per cent. of all traffic may therefore be considered paying traffic. If, then, we take 84½ per cent. of 114 letters we have ninety-six paying letters per minute as the speed-capacity of the cable. In modern business many code words are embraced, and the length of a business word is estimated to contain on an average eight letters. Dividing ninety-six paying letters by eight, we have twelve paying words per minute, after all necessary deductions are made.

In estimating the earning-power of the cable as designed, we are therefore warranted in taking twelve paying words a minute, and certainly 300 working-days a year. With this data, and reckoning 2s. a word as the uniform charge, we have the following results as the possible earnings for the twelve months: Working twelve hours each day, £259,200; fifteen hours, £324,000; eighteen hours, £388,800; twenty-one hours, £453,600; twenty-four hours, £518,400. This shows very plainly that there will be ample capacity in the one single cable designed to transmit all the business which may be developed for many years to come.

I would direct attention to my estimate of gross earnings in page 6 of my statement prepared for the Committee last July. In the table there presented I went no farther than the year 1907, at which date I estimated the earnings from traffic to be £258,500. This is the highest estimate I have made, and it is obvious that the cable designed by Lord Kelvin, with a cone on the long section of 552 lb. of copper and 368 lb. of gutta-percha per knot, would be capable of transmitting the volume of traffic required to produce that amount of gross earnings by working only twelve hours a day.

#### Revenue.

There remains to be considered the revenue which will arise from the traffic which may be expected to pass over the cable. This question is a difficult one, and I quite recognise that it is not possible to demonstrate precisely what the future business may be. In estimates which I have submitted to the Committee I have furnished the grounds for my belief that there will be a natural increase in traffic as the years go on. The increase may not be uniform year by year, but taking a number of years—say, ten years—I have thought that in view of the rapid development of the Australasian Colonies, and the additional facilities for telegraphing which the Pacific cable would provide, together with the reduction in charges, it would be a moderate estimate to reckon on the gross business increasing on an average 15 per cent. a year. Such an estimate may, of course, be held to be a mere conjecture on my part; I have therefore deemed it advisable to obtain the views of gentlemen fully acquainted with the development of the colonies and interested in Australasian trade and commerce. With this object in view, I obtained from the offices of the several Agents-General the names of a few leading men and Australian firms. I sent them a series of questions, asking the favour of replies, the whole of which I am glad to place at the service of the Committee. I may state, as a result of this inquiry, that the expression of opinion is almost unanimous; no less than twenty-four leading Australasian firms or individuals give it as their opinion that an average increase in the yearly volume of business of 15 per cent. is quite a moderate estimate (see abstract of replies appended, page 29).

With respect to the share of business which it would be reasonable to expect would fall to the Pacific cable, among the replies received there are twenty expressing a definite opinion; of these, fifteen, or 75 per cent. of the whole, state the belief that it would be reasonable to count on the new cable obtaining one-half the total business. Most of these gentlemen think the half-share may be reckoned on at once; others, again, within a very short time after its establishment. The remaining five are somewhat doubtful. There is complete unanimity of opinion that the new cable would assist in developing trade and telegraphic communication between the Australasian Colonies and Canada, the United States, and other parts of America, and, as a whole, be of material advantage to the commerce of the Empire. I respectfully submit that these opinions must be taken to sustain the general soundness of the views I have submitted on the growth of telegraphic business, that we may fairly estimate an average increase of 15 per cent. per annum as moderate and reasonable. I have thought, and I still think, that the Pacific cable would obtain not far short of half the total business between Australasia and Great Britain, and that any possible shortage would be more than made good by new traffic between the North American Continent and the Australasian Colonies when facilities for its rapid development are provided by a direct cable across the Pacific.

#### *The Eastern Extension Company.*

I ask permission to add a word with respect to the claims for consideration of the Eastern Extension Telegraph Company. The cables of this company extend from Madras easterly to Hongkong *via* Penang and Singapore. At Singapore a branch extends southerly to Australia. Over this branch all the Australian business now passes; it consists of the following cables: From Singapore to Batavia, 1,002 kilometres; from Singapore to Banjoewangie, 1,707 kilometres; from Banjoewangie to Port Darwin (1), 2,104 kilometres; from Banjoewangie to Port Darwin (2), 2,088 kilometres; from Banjoewangie to Roebuck Bay, 1,656 kilometres; total, 8,557 kilometres. 8,557 kilometres equal 4,620 knots, and this length of cable probably cost in the first place about £800,000; but, as some of the portions have been in use many years, the present value of the whole is assumed to be considerably less than that sum. It must be generally recognised that it is supremely important to have all the great possessions of Her Majesty connected by telegraph. A cable connecting Canada with the sister colonies in the South Pacific would bring them into direct touch with the Mother-country, without passing over foreign soil. It would be useful in an eminent degree to commerce. Its tendency would be to preserve peace, and peace is essential to human progress. The security of the present means of telegraphic communication with Australasia would be enhanced by a line across the Pacific. The Empire cannot have too many cables. Belligerents will not be so likely to destroy any one cable if the connection they would sever be maintained by cables ramifying through seas in other parts of the globe. Safety will be in numbers. For these reasons I hold that the Pacific cable will have a most potent influence in binding together the British Empire and preserving it intact. But the Pacific cable cannot be established without interfering more or less with the Eastern Extension Company. It would not interfere with the China business of that company, but it would certainly diminish the traffic, and consequently the profits earned, on the branch from Singapore to Australia. I would respectfully suggest, therefore, that it would be fair to that company, if they desire to be relieved of it, to

purchase from them the Australian branch at a reasonable price, and work it by Government. The justice of this proposal must be obvious: if by reason of the establishment of a work necessary in the public interests, and a part of the property of the company be rendered unprofitable in consequence, that company would have no reasonable ground of complaint if the unprofitable part be taken off the company's hands and the capital returned for investment elsewhere. The branch from Singapore to Australasia in the hands of the Government would, even with a greatly reduced traffic, be self-supporting. Under Government control, the only charge over current and ordinary expenses would be interest on cost at the lowest rate at which money is obtainable by Governments. In this case the branch would be worked as a self-supporting undertaking for the benefit of the public—in the hands of the company, necessarily the branch is worked as part of a system for earning dividends at the expense of the public.

#### *A Second Pacific Cable.*

In the evidence submitted to the Committee it has been alleged as absolutely necessary, if a trans-Pacific cable be laid at all, that it should be laid in duplicate. Curiously enough, the gentlemen who have laid greatest stress on the necessity for two cables across the Pacific are among those most averse to the establishment of a Pacific cable under any circumstances. It has been made to appear that a single cable has been rarely laid in any part of the world, and that in cases where two cables are not laid side by side at the same time duplication immediately follows. Mr. Preece could not recall an instance of any company relying on a single cable. The impression conveyed was that provision is made for laying both cables from the start, or directly on the completion of one cable the work of laying the second invariably is proceeded with. I take the liberty of mentioning that this course is not universally followed. The Eastern Extension Company's cable from Madras to Penang was single for twenty-one years; the first cable was laid in 1870, it was duplicated in 1891. The cable of the same company from Penang to Singapore was laid in 1870, it was duplicated in 1892, twenty-two years afterwards. The same company laid a single cable from Australia to Tasmania in 1869, and duplicated it in 1897, after a lapse of eighteen years. The same company laid a single cable from Australia to New Zealand in 1876; the second cable was not laid until 1895. The Cape of Good Hope had telegraphic communication established by a single cable in 1879; duplication was not effected until ten years afterwards. A single cable was laid from Portugal to Brazil in 1874, and it was not duplicated until 1884. There are many other instances; I have, however, mentioned a sufficient number to make plain that there is no such rule invariably followed as that alleged. The duplication of a cable is a matter which is entirely governed by circumstances; generally it is proceeded with when additional facilities are required by the traffic or warranted by the prospect of a rapid development of business. I am perfectly satisfied that eventually many cables will be required across the Pacific, but to my mind there is no necessity for establishing more than one at present. In the event of the cables between Singapore and Australasia passing under Government control, a single Pacific cable would, in reality, constitute a third cable connecting Australasia with the rest of the world, and as such it would greatly diminish the chances of the telegraph separation of these colonies.

Of course, the Eastern Extension Company may decline to part with their Australia branch on reasonable terms, or enter into any traffic arrangement which would be mutually beneficial. In that event the expediency of laying a second Pacific cable would, in course of a few years, become a matter of consideration. Should a second trans-Pacific cable for any reason be deemed advisable, in my judgment the most advantageous arrangement would be, not to lay it alongside the first cable on the Fanning Island route, but to open negotiations for touching at Honolulu. I have formed the opinion that, although the application for landing privileges on one of the Hawaiian Islands proved unsuccessful three years ago, the improved friendly spirit beginning to prevail will before long reach that stage when a desire will be evinced for the landing of a Canada-Australia cable at the capital of these islands. In the United States it is seriously proposed to lay a cable from San Francisco to Japan, and it is not improbable that this undertaking will be assisted by the United States Government. It is obvious that two trans-Pacific cables, one from San Francisco to Japan, another from Vancouver to Australia, crossing at Honolulu, would be exceedingly helpful to each other, as the interchange of messages would be rendered easy, and telegraphic correspondence between the countries at the termini of each cable would be greatly facilitated. This arrangement would practically become an international system to facilitate commerce, so much to be desired.

In view of all the circumstances, if I may venture to express an opinion, it seems to me advisable that a determination should at once be reached to lay a single cable on the Fanning Island route as a national undertaking under Government control, and that the cable should be of the weight and character recommended by Lord Kelvin, seeing that the capacity of such a cable for the transmission of messages would be ample for all purposes. In my view, duplication of the cable should be deferred and an opportunity afforded the Eastern Extension Telegraph Company to consider the suggestion to part with their Australian branch on fair and acceptable terms. Should circumstances in a few years require the laying of a second cable from Canada to Australasia, it is clear, to my mind, that great advantages would result from constituting the second cable essentially a commercial line touching at Honolulu. The cost of a cable from Vancouver to Australia touching at Honolulu would be very little, if anything, over a million sterling. Referring to the main cable, that proposed to be laid on the Fanning Island route, the reliable evidence submitted to the Committee now places the feasibility of the proposal beyond all doubt. It has been established that Canada and Australasia can be connected telegraphically without touching foreign soil, and that a cable of adequate speed-capacity can be laid at a moderate cost. The views respecting traffic, of leading merchants and others familiar with Australian trade, give grounds for the belief that the cable established as a national undertaking would be self-supporting. Nothing in the future is more probable than an augmentation of business resulting from the additional facilities provided by the new line of communication and the lowering of charges. The new line will give an impulse to commercial activity, and, besides being eminently useful to commerce, there may be times in the near future, such as the emergency of a few months back which found South Africa telegraphically isolated, when the value of the Pacific cable would be incalculable. No one can withhold assent from the views of the President of the Postal and Telegraph Conference held in Hobart last year (Hon. J. Gavan Duffy), expressed in these words: "I think that for strategical and Imperial reasons, and for encouraging the growth of the Imperial sentiment, it would be a wise thing to lay this cable. . . . It would be a great spectacle to see the three great branches of the Empire united together, and in times of war it would be of immense value to the Imperial Government and the colonies. If it is undertaken it should be by England and her colonies co-operating together. Of course, we must remember that Canada is not so vitally interested in this question as we are. This will be to us not only a connection with Canada, but a direct connection with the heart of the Empire—London."

SANDFORD FLEMING.

#### APPENDIX to Preceding STATEMENT No. 2.

ABSTRACT of replies from leading Australasian merchants and others respecting the growth of traffic, the probable earnings of the Pacific cable, and the effect of that undertaking on general commerce, referred to in the note on the Pacific cable by Mr. Sandford Fleming, London, 16th December, 1896.

In order to ascertain the views of mercantile men and others interested in the Australasian trade, replies were invited to the following question (December, 1896):—

#### FIRST.—*The Probable Development of Telegraph Business.*

Questions.—(1.) With great facilities for business created by the establishment of the Pacific cable and the charges lowered to 3s. per word, would it be reasonable to expect that the gross telegraph business between Australasia and Europe would increase in future years? (2.) Considering the rapid development of the Australasian Colonies, the improved facilities and reduced tariff by the Pacific cable, and having reference to the growth of telegraph business during the past twenty years, would it be unreasonable to expect for a number of years to come an average annual increase of 15 per cent. in the total traffic between Australasia and Europe? (3.) If you think 15 per cent. unreasonable under all the circumstances, please state your opinion of the probable traffic in future years.



*Answers.*—To the above questions answers have been received as follows:—(1.) From Ross and Glendining, 63, Finsbury Pavement, E.C., London: Q. 1. Undoubtedly. Q. 2. We believe an increase of 15 per cent. a moderate estimate.—(2.) From W. Weddell and Co., 16, St. Helen's Place, London: Q. 1. Certainly. Q. 2. Yes; 15 per cent. increase is a reasonable estimate.—(3.) From Mr. John Beaumont, 138, Leadenhall Street: Q. 1. Yes. Q. 2. No; with charges lowered to 3s. per word, I think 50 per cent. more probable.—(4.) From Mr. James Huddart, 22, Billiter Street, E.C.: Q. 1. Yes. Q. 2. Yes; look at the development of cable traffic across the Atlantic by reason of reduced charges. I think 15 per cent. reasonable.—(5.) From Sargood, Butler, Nichol, and Ewen, 11, Bunhill Row: Q. 1. Yes. Q. 2. Yes.—(6.) From Sargood, Son, and Ewen, 11, Bunhill Row: Q. 1. Yes. Q. 2. Yes.—(7.) From Shaw, Savill, and Albion Company, 34, Leadenhall Street: Q. 1. Yes. Q. 2. 15 per cent. annual increase might reasonably be expected.—(8.) From McLean Brothers and Rigg, 1, Fenchurch Avenue, E.C.: Q. 1. Certainly. Q. 2. We should think considerably more.—(9.) From James McEwan and Co., 27, Lombard Street, E.C.: Q. 1. Yes, certainly. Q. 2. I think it would not be unreasonable.—(10.) From the Bank of Australasia, 4, Threadneedle Street: Q. 1. As the business has increased largely of late years, it would be unreasonable to suppose that it would not continue to do so if the rates were reduced. Q. 2. As the rate of increase has for some years past been largely in excess of 15 per cent., the opinion may fairly be held that the latter figure would not be an excessive estimate.—(11.) From Grimwade, Ridley, and Co., 82, Bishopsgate Street: Q. 1. Our experience has been that reductions in cost of telegraphing has resulted in increased use of cables. Q. 2. We should not consider this an unreasonable increase to look for.—(12.) From J. E. Nathan, 7, Fenchurch Street: Q. 1. Yes. Q. 2. Yes, I think this very reasonable.—(13.) From Sir Julius Vogel, Hillenden, East Molesey: Q. 1. Most decidedly. Q. 2. The annual increase of traffic would be very large, but not at a uniform rate. During the first five years it would, in my opinion, more than double, or an increase of more than 15 per cent. per annum for those years. The normal increase subsequently would probably be at a less rate.—(14.) From Turnbull, Martin, and Co., 112, Fenchurch Street: Q. 1. Certain. Q. 2. No.—(15.) From W. Lund, 3, East India Avenue: Q. 1. Yes. Q. 2. I should consider 15 per cent. increase very reasonable.—(16.) From Loughland, Mackay, and Baker, 50, Lime Street: Q. 1. Yes. Q. 2. No.—(17.) From S. Hoffnung and Co., 102, Fore Street, E.C.: Q. 1. Yes, but not in proportion to the reduction in cost. Q. 2. Yes.—(18.) From Colonial Consignment and Distribution Company (E. Montague Wilson): Q. 1. Yes. Q. 2. 15 per cent. increase not unreasonable; but it must be remembered that the last two years have shown exceptional traffic with West Australia, which is not so active at present.—(19.) From Nathaniel Cork, managing director, Commercial Banking Company, of Sydney: Q. 1. Yes. Q. 2. Since the last reduction in rate the number of messages to and from the bank has increased 63·2 per cent., and the volume has increased by a far larger percentage, so that a further increase of 15 per cent. consequent upon a reduction of 40 per cent. in the tariff might very reasonably be expected.—(20.) From Milburn and Co., Billiter Avenue: Q. 1. Yes. Q. 2. No.—(21.) From Sir Edwin Dawes, 23, Great Winchester Street: Q. 1. Yes, judging by past experience. Q. 2. No, considering the increasing vitality of trade with Australasia and the internal development of colonial resources.—(22.) From Gray, Dawes, and Co., 23, Great Winchester Street: Q. 1. Yes, judging by past experience. Q. 2. No.—(23.) From the Australian Joint-stock Bank, 2, King William Street: Q. 1. Yes. Q. 2. No.—(24.) From Gilbert J. McCaul and Co., 27, Walbrook Street: Q. 1. Certainly. Q. 2. Safe to reckon on 15 per cent. increase.—(25.) From Richard Maxwell, 15, Moorgate Street: Q. 1. Undoubtedly. Q. 2. Not unreasonable.—(26.) From McIlwraith, McEacharn, and Co., 3 and 4, Lime Street Square, E.C.: Q. 1. Perfectly reasonable. Q. 2. Not at all.—(27.) From Joseph Gould, Christchurch, New Zealand: Q. 1. Yes, certainly, it would increase. Q. 2. I think 15 per cent. per annum a moderate estimate of the probable increase.

*SECOND.—The Probable Traffic of the Pacific Cable and its Effect on the Commerce of the Empire as a Whole.*

*Questions.*—(4.) Would the Pacific cable be likely to obtain a fair share of the total telegraph business between Australasia and the United Kingdom? (5.) Would it be reasonable to count on the Pacific cable obtaining one-half of the total business between Australasia and the United Kingdom? (6.) If you think the Pacific cable would not obtain as much as one-half of the total business, please state what proportion of the whole might, in your opinion, fall to its share. (7.) Can it reasonably be expected that the establishment of the Pacific cable as proposed would assist in developing trade and telegraphic communication between the Australasian Colonies and Canada, the United States and other parts of America, and as a whole be of material advantage to the commerce of the Empire?

*Answers.*—To these questions replies have been received as follows:—(1.) From Ross and Glendining, 63, Finsbury Pavement, E.C.: Q. 4. We believe so. Q. 5. We believe this would happen in a short time. Q. 7. We have no doubt of it, and would use the cable ourselves if laid to a much greater extent than we use the existing cables.—(2.) From W. Weddell and Co., 16, St. Helen's Place: Q. 4. Yes, if as efficiently worked as the Eastern Telegraph Company. Q. 5. Yes. Q. 7. Most certainly.—(3.) From John Beaumont, 138, Leadenhall Street: Q. 4. Yes. Q. 5. More, if the Pacific cable did not mutilate as much as existing cables. Q. 7. Yes.—(4.) From James Huddart, 22, Billiter Street, E.C.: Q. 4. Without doubt. Q. 5. I think so. It would be the policy of merchants to keep it alive. Q. 7. As certain as gravitation.—(5.) From Sargood, Butler, Nichol, and Ewen, 11, Bunhill Row: Q. 4. Yes. Q. 5. Yes, provided the charges were equal. Q. 7. Yes, it could not fail to be of material advantage.—(6.) From Sargood, Son, and Ewen, 11, Bunhill Row: Q. 4. Yes. Q. 5. Yes. Q. 7. Yes.—(7.) From Shaw, Savill, and Albion Company, 34, Leadenhall Street: Q. 4 and Q. 5. Yes, the extent of this would entirely depend upon how the business was conducted. Q. 7. Yes.—(8.) From McLean Brothers and Rigg, 1, Fenchurch Avenue, E.C.: Q. 4. It largely depends on the mode of business. Q. 5. Should scarcely think so, but the former answer somewhat governs this. Q. 7. Yes.—(9.) From James McEwan and Co., 27, Lombard Street: Q. 4. This would depend on the rates charged. Q. 5. I doubt it unless the new line was more accurately worked than the present. Q. 6. I cannot form an opinion. Q. 7. I think so.—(10.) From the Bank of Australasia, 4, Threadneedle Street: Q. 4. If the service should be as well performed. Q. 5. No means of judging. Q. 7. On the principle that two routes are better than one, a material advantage should accrue.—(11.) From Grimwade, Ridley, and Co., 82, Bishopsgate Street: Qs. 4, 5, 6, and 7. In our opinion, if the new proposed route is cheaper than existing routes it would naturally command support from all needing to cable; possibly increased facilities of inter-communication may benefit commerce. One thing is certain, that it will increase the work that has to be done on this side.—(12.) From J. E. Nathan, 7, Fenchurch Street: Q. 4. Most decidedly. Q. 5. Yes. Q. 7. Yes, certainly, and decidedly of very great advantage.—(13.) From Sir Julius Vogel, Hillenden, East Molesey (letter appended): Q. 4. See answer 6. Q. 5. Certainly not with one cable only. Q. 6. If the Eastern companies charge the same, I do not think the Pacific route will obtain more than a quarter to a third of the traffic, so long as the system comprises only one cable. The proportion will be liable to considerable decrease if the cable is interrupted frequently or for lengthened periods. The Governments may assist traffic by their own business, and by giving the route preference for unmarked messages. It would not be safe to calculate on more than (if so much as) a third. See my covering letter (appended). Q. 7. Most certainly, yes.—(14.) From Turnbull, Martin, and Co., 112, Fenchurch Street: Q. 4. Yes. Q. 5. Yes. Q. 7. Yes. I am connected with companies paying considerably over £2,000 a year in telegraphing to Australasian Colonies.—(15.) From W. Lund, 3, East India Avenue: Q. 4. Yes, if the messages were delivered speedily and accurately. Q. 5. Yes; probably more. Q. 7. I consider it would be of very material advantage to the commerce of the Empire.—(16.) From Loughland, Mackay, and Baker, 50, Lime Street: Q. 4. Yes. Q. 5. Yes, in time. Q. 7. Most certainly; we come to this conclusion after fifty years' experience of Australian trade.—(17.) From S. Hoffnung and Co., 102, Fore Street, E.C.: Q. 4. Yes. Q. 5. Certainly not at first. An established company will retain a large proportion of a trade or business in spite of opposition. Q. 7. Yes.—(18.) From the Colonial Consignment and Distribution Company (E. Montague Wilson): Qs. 4, 5, and 6. A fair share, but probably not for some time half the business if the existing company works at same tariff. Q. 7. Undoubtedly.—(19.) From Nathaniel Cork, for Commercial Banking Company of Sydney: Q. 4. Yes, provided the messages between London and the colonies received each day at 4 p.m. are delivered by 10 a.m. at either end. Q. 5. Certainly yes, if the above condition can be relied on. Q. 7. Means of communication with the Pacific is much needed. There can be no doubt that a cable between Australia and British North America would lead to a large business between the two. Australia would take American timber and wheat. America would import coal, wool, and fruit.—(20.) From William Milburn and Co., Billiter Avenue: Q. 4. On equal

terms, yes. Q. 5. That would depend on facilities given.—(21.) From Sir Edwyn Dawes, 23, Great Winchester Street: Q. 4. Yes, if rapidity and accuracy in transmission are insured. Q. 5. Yes, in course of time, owing to the national interest in the movement, if charges and facilities are equal. Q. 7. Undoubtedly, if a moderate tariff is fixed.—(22.) From Gray, Dawes, and Co., 23, Great Winchester Street: Q. 4. Yes, with rapidity and accuracy secured on account of the lines traversing British territory only. Q. 5. This would depend on the speed and accuracy with which the business was carried through. Q. 7. Yes.—(23.) From Mollwraith, McEachran, and Co., 3 and 4, Lime Street Square, E.C.: Q. 4. We think a Pacific cable would absorb the largest proportion of the business. Q. 5. We should say a higher figure than 50 per cent. Q. 7. We consider that a Pacific cable would be of immense advantage in developing the trade of Australasia.—(24.) From Joseph Gould, Christchurch, New Zealand: Qs. 4, 5, and 6. Yes, more than a full share. The colonial public do not like the idea of the cables going through Dutch hands, and would prefer the Pacific cable. Q. 7. I do not think that there can ever be a very big trade between the United States of America or Canada, as they produce the same things principally as the colonies, but the cable would certainly assist business generally, and a reduction in the cost of cabling would lead to an increased use of the cable.

*Letter referred to in the Answers to Questions by Sir Julius Vogel (No. 13).*

SIR,—

7th December, 1896.

I have the honour to acknowledge the receipt of your letter of the 4th instant, with an enclosure. I do not know why you wrote to me, since your inquiry purports to be one addressed to "mercantile men engaged in the Australasian trade," and I am not a mercantile man. Officially I have been interested in the question of a Pacific cable to connect Australia with America for many years past. I believe I originated the idea, and I have written a great deal about it. I am not sure that the Committee should not have invited from me any information it desired me to give, and I have to ask you to be good enough to lay before the Committee a copy of this letter and of my replies to your questions, which I have pleasure in answering because I know of your indefatigable exertions in the cause.

There is one factor which essentially concerns most of your questions, and that is the terms upon which you propose to work with the Eastern and Eastern Extension Companies. Are they to be able to obtain a control over your enterprise? If so, it is hardly to be supposed they will give you half the traffic, as several of their lines are duplicated. Even supposing you run in honest opposition at the same rates they would have all the West Australian and South Australian business, the bulk of the Victorian business, and a considerable quantity of that of New South Wales. The intercolonial rates will, I believe, give an advantage to the Eastern lines with regard to the first two-mentioned colonies, unless Adelaide is in direct communication with Sydney, of which I am not aware. Victoria will probably be on an equal footing with both systems. But both this colony and New South Wales, if the rates are the same, will largely adhere to the existing route, because the big houses will fear that if any mischance befall the Pacific cable they will be put by the Eastern companies on worse terms if they have been in the habit of using the Pacific line. You attach, I think, too much importance to the Canadian route proving of superior accuracy. The present route now gives fairly accurate transmissions. In recounting the number of repeating-stations you do not estimate those on the overland route through Canada, nor do you take into account the value of the trained operators accustomed to deal with the code words which constitute a great part of the messages. In point of accuracy I think a long time will elapse before the Canadian route will be entitled to preference.\* The crucial question in estimating the traffic is, can the Eastern companies reduce the rate to 3s.? and I believe there is no doubt they can. In fact, in your memorandum you admit it. They cannot, however, go much below it, and I am disappointed at your having fixed the rate at 3s. I had looked for its being fixed at 2s. I do not hesitate to say that at 2s. your revenue would be much larger than at 3s., because you would have the bulk of the business. Supposing you are compelled to adhere to the latter rate, I am far from saying that your enterprise is not desirable, and that though it would be less remunerative it would not be a financial success. You would obtain a considerable portion, though not a half, of the through business, and you would also as time went on have a very large traffic from and to all the Australasian Colonies and America. In any case, therefore, I think the enterprise justified, but provision should be made for supplying a second cable as soon as practicable. Your questions suppose a uniform annual progress, and you speak of an annual increase of 15 per cent., which means doubling the traffic every five years. I have no doubt that the volume of Australasian cabling will be more than doubled the first five years, with the reduction of the charge to 3s. a word, but it cannot continue indefinitely to increase at that rate. At 2s. the increase would be much larger and your share much greater.

Sandford Fleming, Esq., &c.

I have, &c.,

JULIUS VOGEL.

LETTER to the PREMIER on the Present Position and Financial Prospects of the Pacific Cable,  
by SANDFORD FLEMING.

SIR,—

Ottawa, 20th May, 1897.

I deem it my duty to submit to your attention the following additional information in connection with the proceedings taken last year by the Committee appointed by the Imperial Government to consider the proposal to establish an electric cable from the western shore of the Dominion to the Australian Colonies. In my judgment, great importance must be attached to the facts I ask your leave to lay before you.

Apart from the national value of the proposed Pacific telegraph-cable as the means of instantaneous communication between distant portions of the Empire, its financial aspect as a commercial undertaking calls for the most careful consideration. On the theory that the cable will be established as a State work under federated ownership, I have formed the firm opinion that the revenue from ordinary business will be amply sufficient to meet every charge of service and maintenance, and that it will make the line perfectly self-supporting, even from the first day it may be opened for general traffic. I have been led to this conclusion by the careful examination of the returns of traffic for the past years, and by a study of those circumstances which have a special bearing on the business of the future. This investigation has satisfied me that, the Pacific cable being in operation, a considerable volume of telegraph business would speedily be developed between Canada and Australasia; that, even without taking into consideration this new trans-Pacific business, the ordinary telegraph traffic between Australia, New Zealand, and Europe is of such a character and volume as to render it extremely improbable that the new cable-service would entail any permanent charge, or any charge whatever, on the public exchequer.

\* NOTE.—In reference to the remarks of Sir Julius Vogel in the above letter, the undersigned deems it proper to point out that it is manual as distinguished from automatic repetitions which causes delay and increases the chances of error in the transmission of messages. The repeating-stations on the overland route through Canada are automatic, and in a comparison should not be taken into account. By the Eastern route there are ten manual repeating-stations intervening between Great Britain and Australia—viz., Gibraltar, Malta, Alexandria, Suez, Aden, Bombay, Madras, Penang, Singapore, and Java. By the Pacific route there would be five manual repeating-stations—viz., Canso, Vancouver, Fanning Island, Fiji, and Norfolk Island. With but half the number of such repeating-stations, naturally the tendency to greater accuracy and speed in transmission and generally to a better service by the new route would be increased.—SANDFORD FLEMING.

The profits to be derived from the Australasian-European traffic will of course be determined by the amount of service performed. It will in fact depend, first, on the future growth and development of such traffic as already exists, and, secondly, on the proportion of the business which may be diverted from the old channel to the new line.

The steady and extraordinary growth of telegraphy between Australasia and Great Britain is made apparent by the number of words transmitted by the existing line *via* Egypt and India. The following statement gives the volume of business at intervals of five years: 1875, total words transmitted, 235,160; 1880, 353,348; 1885, 537,355; 1890, 827,278; 1895, 1,948,639. These figures are taken from the Government returns; certainly they display an amazing vitality in telegraphy between the sister colonies and the Mother-country, a vitality which received a great impulse by the reduction of the charges on messages six years ago, and which it may be confidently assumed will be further stimulated by the proposed reduction of charges consequent on the laying of the Pacific cable.

At the recent meetings of the Imperial Committee doubts were expressed as to the volume of business being maintained. It was urged that there were exceptional circumstances to favour the increase of traffic in 1895, and that in all probability the returns for 1896 would show a considerable decrease. If the tendency of these anticipations was to create misgivings, I have the satisfaction of knowing that they can no longer be entertained, for the fears expressed on this point have proved groundless. By a recent communication to the Minister of Trade and Commerce from Mr. J. S. Larke, the Commercial Agent of Canada in the Australasian Colonies, it is shown that the business for 1896, instead of being less than 1895, exceeds it by 378,345 words, or about 20 per cent. on the traffic for the year. Mr. Larke thus summarises the telegraph business for the last six years: In 1891, total words transmitted, 1,110,869; in 1892, 1,321,412; in 1893, 1,401,293; in 1894, 1,323,243; in 1895, 1,948,639; in 1896, 2,326,984.

Mr. Larke proceeds: "This shows a remarkable development of cable-work. It was held by some here that the increase of cabling would be slow in the years to come, and that Mr. Fleming's estimates were absurdly high. The work done last year was nearly 45 per cent. higher than Mr. Fleming's estimate made in 1893, and the increase of the last five years was much greater than that of any preceding quinquennial period. The last returns more than support the opinion of Mr. Fleming, that the revenue of the cable for the year 1900 would be £143,000, making it self-sustaining from the first year of its operation. At the same time the Eastern Extension Company, which now controls the business, will secure a larger revenue on the reduced rate than it had on the present rate in 1891."

Mr. Larke has referred to the estimates made by me in 1893. When present in Australia in that year I had the advantage of possessing the information obtainable at the Government Offices, kindly placed at my disposal by the Premiers of the several colonies. I was thus placed in a position to form an estimate of the future traffic. On the data thus obtained I reached the conclusion that the Pacific cable, if established by the Government as previously suggested, would at an early date be self-sustaining, and within four or five years would prove profitable as a commercial enterprise (Report on the Mission to Australia, pages 71-72). That I then took a moderate view of the development of traffic is obvious from a comparison of my estimate of the probable business in future years, submitted to the Australasian Government by me in October, 1893, with the actual number of words transmitted in each year since that date:—

|      |     |     |     |     | Estimate made<br>in 1893. | Words transmitted<br>Yearly. |
|------|-----|-----|-----|-----|---------------------------|------------------------------|
| 1894 | ... | ... | ... | ... | 1,275,191                 | 1,323,243                    |
| 1895 | ... | ... | ... | ... | 1,453,716                 | 1,948,639                    |
| 1896 | ... | ... | ... | ... | 1,632,244                 | 2,326,984                    |

The comparison shows that in 1894 the actual business exceeded my forecast by 4 per cent., in 1895 by 34 per cent., and in 1896 by 42 per cent. In no spirit of self-laudation I refer to these facts, they are now mentioned as a proof of my endeavour to keep my estimates equally of revenue as of expenditure within justifiable limits, and that I cannot be charged with having been too sanguine. The results, indeed, are far above the estimates I submitted in 1893; at that time I counted on a growth of business at the average rate of 14 per cent. per annum, but the actual business for the three following years shows that I estimated the increase of traffic at too low a ratio.

In my letter the following year to Sir Mackenzie Bowell (20th July, 1894) I corrected the calculation somewhat by reckoning the growth at 15 per cent. per annum, at the same time pointing out that an annual increase of 18 to 20 per cent. was justified by the evidence. I then wrote: "Manifestly under the low rates proposed to be charged by the Pacific cable the normal increase will be greater than 14 per cent. per annum, more especially as the whole North American business will receive a great incentive from direct communication, and all this additional and constantly growing traffic must find its way by the Pacific cable to and from Australasia. I venture to think that it would not be too sanguine an estimate to place the annual increase of business at 18 or 20 per cent., but to be perfectly safe I shall limit it to 15 per cent. in the calculations which follow—that is to say, 1 per cent. more than the average increase attained under the high tariff for the eight years previous to 1890." Events have proved that my anticipation of growth have been in no way extravagant: in each succeeding year the actual business has considerably exceeded the estimates made by me.

Further evidence respecting the probable growth of telegraph business in future years is furnished by the important testimony of the Australasian gentlemen and leading Australasian and New Zealand business houses, appended to my note dated London, 16th December, 1896. This positive opinion of so many well-known mercantile firms and public men of the highest standing must carry with it the greatest weight. From their knowledge of the circumstances and prospects of the Australasian Colonies there are no persons better qualified to speak authoritatively on the

points on which they were consulted. I beg leave to refer to my note (pages 29 to 32\*) for fuller explanations; I will only now remark that the expression of opinion was almost unanimous, as twenty-four out of twenty-seven gave as their belief that an average increase of 15 per cent. in the yearly volume of business may be regarded as a very moderate estimate. With respect to the second consideration—viz., the share of the whole telegraph business which would be obtained by the Pacific cable: this is a matter in which opinions are somewhat less in agreement. Twenty of those named gave definite replies, and fifteen of them expressed their belief that it would be reasonable to count on the Pacific cable obtaining one-half the whole business. Five of the twenty, however, expressed doubt as to the traffic being equally divided.

Having brought under your notice the latest information respecting the development of Australasian traffic, it may be considered desirable and convenient that I should concisely allude to estimates of profit or loss in working the cable, which have recently been prepared. In so doing it will not be necessary to consider at length the annual charges. These are discussed in the report of the Imperial Committee (5th January, 1897), and in other reports. Moreover, the opinions respecting these are now generally in accord.

In summing up the financial position of the cable the Imperial Committee formed the conclusion that the total annual charges, including interest, sinking fund to replace capital, maintenance and working-expenses, would involve an annual expenditure of £144,887, or in round figures £145,000. With regard to the revenue as set forth in their report, they conceived that in this matter "they must be actuated by extreme caution"; accordingly they selected 750,000 words as a basis of calculation for the year 1896, and considered that they might assume the annual increase of traffic at 10 per cent. On this data they show that, reckoning the tariff at 3s. per word, there would be a surplus on the first year's working of £33,550, and that if the tariff be placed at 2s. per word there would be a deficiency in earnings for the first three years ranging from about £35,000 to £12,000 per annum, but during the fourth year of working the cable would become commercially a paying undertaking. Since the date of the report of the Committee the business for the year 1896 has been ascertained to consist of 2,326,984 words, so that the basis of calculation selected by them—viz., 750,000 words for the year 1896—is less than one-third the whole number of words transmitted.

The Canadian Commissioners in their special report (12th January, 1897) favour a higher basis of calculation—viz., a mean between one-third and one-half, which on the total number of words for 1895 would have given 811,820 as the figures for that year. They furnish an estimate in which the annual increase is assumed to be  $12\frac{1}{2}$  per cent., the mean between 10 per cent. and 15 per cent. With this data they show that, under a 2s. per word tariff, the undertaking would yield a surplus for the first year of operation, and at the end of six years the accumulation of surplus would be £347,631 after making all charges.

In my own report (30th January, 1897) I have submitted an estimate (No. 3) which is based on the general opinion of the large number of Australasian merchants and public men whom I have referred to. In this estimate it is assumed that the Pacific cable will obtain one-half of the whole business, and that the traffic will increase annually at the average rate of 15 per cent. On this basis the estimate shows that, after meeting every charge against earnings, there would remain in the first year of operation (1900) a surplus of £50,960, that the surplus would go on increasing every year, and in a few years would accumulate to a large sum, so large that I do not think it is taking a too sanguine view to entertain the prospect of a second cable being laid out of surplus earnings; unless it be considered the wiser policy to lower the tariff on messages from time to time, and thus, by facilitating the means of intercourse, promote in the most practical manner a closer intimacy between the sister colonies and the Mother-country.

These several estimates establish the satisfactory financial prospects of the proposed cable in its commercial aspect alone. I am firmly convinced that as a national undertaking it must prove a commercial success, and that all its advantages can be attained without cost to the taxpayer in the United Kingdom, in the Dominion, or in the Australasian Colonies. That the financial prospects are of this character may be attributed to various circumstances, among which may be noted: (1) As a State work the capital employed would be obtained at the lowest possible rate of interest; (2) the capital would be limited to the necessities of actual expenditure in establishing the work—there would be no possibility of enlarging the capital account by adding "promotion expenses," or by "watering stock" in any form, so common with ordinary companies; (3) no dividends would require to be declared out of earnings; (4) there would be no annual bonus expected by shareholders; (5) the traffic necessary to keep the work in profitable operation already exists; (6) such traffic is continually growing, and it is difficult to assign a limit to its growth; (7) the facilities created, and the reduced charges on business, would open up new and profitable sources of traffic for the new line.

There are the strongest reasons for taking a hopeful view of the proposed Pacific cable. In all cases telegraphy as a means of intercourse is being appreciated more and more every day. The extension of its use to many purposes is one of the characteristics of the period on which we are entering. In ordinary cases we are daily made to feel the benefits conferred by telegraphy, but its greatest value is in the case of countries geographically separated by the greatest distances. Obviously in the case of the outer Empire the value of cheap telegraphy is incalculable. I have in these sentences submitted to you, from a sense of duty, the latest facts within my knowledge. If in endeavouring to explain their bearing on the Pacific cable I have confined my remarks to the financial aspect of the project, I hope you will not think I have needlessly intruded upon your attention.

I have &c.,

The Hon. Wilfrid Laurier, Premier.

SANDFORD FLEMING.

LETTER to the Right Hon. Sir WILFRID LAURIER, on the Subject of the Pacific Cable, by  
SIR SANDFORD FLEMING, 28th December, 1897.

[Reprinted from *Queen's Quarterly*, Vol. 5, No. 3.]

SIR,—

Ottawa, 28th December, 1897.

For some months past I have frequently been asked by writers of the Press to furnish information respecting the Pacific cable. I have been so applied to as it is well known that I have long felt the deepest interest in the project, having been appointed by the Canadian Government to take part in the Colonial Conferences of 1887 and 1894, and in the Imperial Committee of 1896. I have invariably declined to comply with the request from the feeling that it was distinctly understood that the proceedings of the investigation by the Imperial Committee should be treated as confidential until made public by Her Majesty's Government. I have in consequence felt debarred from alluding either to the evidence obtained by the Committee or to the conclusions submitted in their report, or in the special reports presented to the Canadian Government by the Canadian Commissioners and by myself.

These several documents were presented nearly twelve months ago; since then questions have arisen which were not considered by the Imperial Committee, and many important facts are also obtainable from other sources, explanations respecting all of which should, I conceive, be communicated to the public. Since the Imperial Committee closed its investigation the Conference of Colonial Premiers has been held in London. Among other matters the Pacific cable was brought before this Conference, and from what has transpired the subject was complicated by a new proposition having been submitted by the Eastern Extension Telegraph Company. Consequently, the consideration of the project was deferred. Six months has since elapsed, and I feel called upon to make known some facts and explanations bearing on the questions which, in my humble judgment, the public should understand. I trust you will approve of the information being given to the public in the form I have now to submit to you.

I have, &c.,

The Right Hon. Sir Wilfrid Laurier, Premier.

SANDFORD FLEMING.

### *The Pacific Cable.*

Everywhere it is apparent that the British Empire is being formed by a process of growth and development, and there are many forces actively in operation, all tending to give it shape and strength and distinctive character. Lofty ideals are entertained by men of thought, experience, and patriotism; but the future is veiled from us, and we cannot foretell the precise form of relationship which will eventually be assumed by members of the British family of nations in so many meridians of longitude.

If the form of the development to be attained is not clearly foreseen, it can at least be said that the entire British people in all parts of the globe are inspired by a unity of sentiment, and that they are simultaneously moving onwards in one general direction. Progress is the watchword in all quarters. It is impossible not to recognise the advancement perceptible in the colonies of the southern seas, and, equally, the amazing vitality in British Africa. The Dominion of Canada plays an important part in moulding the destiny of her own people and in promoting more intimate relationships between the Motherland and the colonies.

It is but thirty years since the scattered provinces of British North America became federated in one Government. The Dominion thus created inherited many remarkable advantages. It can lay claim to the most important geographical position, owing to its extension between the two great oceans; a position which confers the only means of establishing under the British flag communications between the eastern and western territories of the globe. It enjoys the possession of vast fields of the richest virgin soil, with still unexplored mineral regions of immense extent, and presumably of immense value. The population retains the high qualities of the foremost nations of Western Europe, from which it has sprung; and the wide expanse of unoccupied areas leaves ample room for a large accession to its number. These rich possessions of the Dominion give promise, under wise guidance, of a splendid future. It soon became evident that the development of a country continental in its extent exacted public works of a corresponding magnitude. Lines of railway and telegraph were projected from ocean to ocean, and immediately after confederation both were proceeded with. In 1874 the policy of establishing the telegraph in advance of the railway was determined upon, and, as a corollary to the trans-continental telegraph, the proposal to extend the electric wire across the Pacific naturally followed. It can be said that ever since the telegraph reached the coast of British Columbia the Pacific cable has engaged public attention, and that the necessity of this undertaking has been repeatedly affirmed. It received recognition in the Conference of representative colonial statesmen in London in 1887; in that of Ottawa in 1894; at Telegraph and Postal Conferences in Australasia almost annually; and at various times by chambers of commerce at Home and abroad.

The dominant idea with those who have most strongly advocated the establishment of a Pacific cable has been the unity of the Empire. They foresaw the difficulty of effecting any practical union between communities separated by distance so long as they remained without the means of direct and cheap communication. At the same time it was plain to them that a telegraph across the ocean would foster trade and commerce—the life of an Empire such as ours.

Among the memorable gatherings of representative men, not the least important was the Conference of Premiers in London on the occasion of Her Majesty's Diamond Jubilee. Before these statesmen met, hopes had been entertained that some definite action would be determined for the inauguration of the scheme. Preparations had long been made for joint action. It was one of the

chief objects set apart for special consideration at the Conference of the Imperial and Australasian Governments held at Ottawa in 1894. With this view the Canadian Government, agreeably to a resolution of the Conference, obtained much information on the subject, and transmitted it to all the Governments interested in the projected work. Soon afterwards the Secretary of State for the Colonies (Mr. Chamberlain) invited the Canadian and Australasian Governments to send representatives to London for the purpose of taking part in an Imperial Committee to be appointed specially to receive evidence and consider the project in every detail. The Committee first met on the 5th June, 1896, and on the 5th January, 1897, they reported the results of an exhaustive inquiry.

The proceedings of the Committee and the conclusions which have been formed have not been made public. They have been repeatedly asked for, but, as nothing transpired respecting the labours of the Committee up to the Jubilee week, the opinion gained ground that when the Conference was concluded full information would be given to the public, with the decision arrived at by the Imperial authorities and the colonial Premiers. In many quarters it was expected that action would on that occasion be taken, and that the inauguration of the cable would result as a practical outcome of the Queen's Jubilee. The old proverb tells us that it is often the unexpected which comes to pass. The proceedings of the Conference of Premiers were first made known to the public by an article purporting to be published by authority in the *London Standard* of the 25th July, and the subject of the Pacific cable is thus alluded to: "The Conference left the Pacific-cable scheme in mid-air, and it is very unlikely that anything more will be heard of it for a considerable time. The position was entirely changed by a proposal by the Eastern Extension Telegraph Company to lay an all-British line from Western Australia across the Indian Ocean to Mauritius, thence connecting with the Cape and St. Helena and Ascension. . . . The Eastern Extension Company, it is understood, does not ask for a direct subsidy for the new lines, but seeks other concessions from the Australasian Governments which, if made, will justify them in proceeding with the work."

In the account of the Conference of Premiers laid before the British Parliament there is a reference, in two sentences, to the cable; no mention, however, is made of any proposal having been submitted by the Eastern Extension Company. But the Premier of New South Wales (Mr. Reid) returned home from England through Canada, and, being interviewed by reporters in Montreal, Toronto, and Vancouver, confirmed the statement with respect to the proposal of the Eastern Extension Company. The character of the concessions asked by the company has not been made public, but it has been stated that they desire to obtain exclusive rights for Australia on condition that they connect the colonies with the Cape and lay a new cable from the Cape to England *via* St. Helena, Ascension Island, Sierra Leone, or Bathurst and Gibraltar. This scheme is put forward by the company as a substitute for the Pacific cable.

Owing to the fact that telegraphic connection with the Cape is at present extremely defective, the proposal of the company is undoubtedly of great importance to South Africa. There are two telegraphic routes from England to Cape Colony. Both have landing-stations at Lisbon; one passes through the Mediterranean to Alexandria, through Egypt to Suez, through the Red Sea to Aden, and from Aden the cable follows the east coast of Africa, touching, among other points, at Mozambique and Delagoa Bay, in foreign territory. The other route leaves the first at Lisbon, and follows the west coast of Africa, touching at some fourteen points, eight of which are under foreign flags, those of Portugal, France, and Spain. Interruptions are frequent on both routes. There is evidence to establish that during the past four years communication between England and the Cape has been broken many times, and that the aggregate interruptions have averaged in each year seventy-five days on the west coast route, and eighty-seven days on the east coast route; showing that each cable is unavailable from six to seven days per month. While this refers to the average period that the cables have been thrown out of use, the durations of single interruptions have varied from one to thirty or forty days. As both lines are liable to be broken at the same time, serious inconveniences have not seldom resulted. Every one will remember this contingency occurring when the Transvaal difficulty was at its height. Intense anxiety was then caused during the cable interruption of eleven days, when South Africa was passing through an acute crisis in her history.

Obviously a new cable to the Cape is much required, and, as the frequent interruptions to traffic by the two present routes is to a large extent owing to the fact that the cables are laid in the shallow water which prevails along the African coasts, they are in consequence exposed to accidents to which cables in deep waters are not subjected. That part of the proposal, to touch at St. Helena and Ascension, where the water is of ample depth, would give to the cable the necessary security and avoid the difficulties experienced on the present routes. It is, however, not so clear that the northern half of the new cable would be so fortunate. By landing at Sierra Leone or Bathurst and Gibraltar, and terminating in Cornwall, the cable of necessity would be laid for some distance in shallow seas, where it would be exposed to injury from various causes, and where, too, the agent of an unfriendly nation, or, indeed, an evil-disposed fisherman, would have it in his power to destroy the cable with ease, totally unobserved. For hundreds of miles it would be exposed to such risks.

The question may be asked, would not this proposed new cable from England to the Cape with an extension to Australia be of general advantage? To such a question there is but one answer. It certainly would be of general as well as special advantage, for the reason that we cannot have too many lines of communication. They are needed in the every-day business of trade and shipping, and, moreover, we must come to recognise that a complete telegraph system ramifying wherever Her Majesty's wide domain extends is an essential condition of the life and integrity of the British Empire. It is on this and on other grounds impossible to admit the claim of the Eastern Extension Company, that the proposal submitted by them is preferable to a trans-Pacific cable, and that it will render it unnecessary.

At the Colonial Conference of 1894 the outline of a telegraph system for the Empire was submitted. It was not confined to one side of the globe; the system projected embraced, and



encircled its whole extent. The scheme was illustrated by a map of the world, with the chief cable-lines laid down upon it. If the proceedings of the Conference be referred to it will be seen that a trunk line of telegraph was projected from London through Canada to Australasia, with extensions to South Africa, India, and China. It was shown that by the Canadian route all the chief British possessions on the four continents would be brought into electric touch with each other and with the Imperial centre in London. It was demonstrated, moreover, that this result could be accomplished without touching a single acre of foreign soil, and without traversing shallow seas where cables are most liable to injury from ship's anchors and other causes, and where they can be so easily fished up and destroyed. No fact can with greater confidence be affirmed than that the cables by the Canadian route would be far less vulnerable than the existing cables, or those now projected by the Eastern Extension Company. But even if no advantage in this respect could be claimed, it requires no argument to prove that telegraphic connection between England and Australasia would be infinitely less subject to interruption from accident or wilful injury by having the Canadian line established in addition to the Eastern Extension lines, especially as the former would be on the opposite side of the globe and far removed from the immediate theatre of European complications.

It is not possible to believe that any one disassociated from, and uninfluenced by, the Eastern Extension Company can view the proposed Canadian Pacific cable with disfavour. If it be important to strengthen the connection between the United Kingdom and the outlying portions of the Empire, no one can question its necessity. But the Eastern Extension Company has never taken a friendly view of the Pacific cable. From the first it has been its determined opponent. The proceedings of the Colonial Conferences of 1887 and of 1894 give evidence of this fact. The report on the mission to Australia by the Canadian delegates gives some indication of the intense and persistent antagonism displayed by the company and the manner in which its powerful influence has been employed to thwart the enterprise. It may not be an unwarranted surmise that the immediate purpose of the company in submitting to the Conference of Premiers their new proposal was to divert attention from the Pacific cable.

The Eastern Extension Company represents a combination of associated companies engaged in telegraph transmission between England and Australasia. The lines of the company comprise those of three amalgamated companies: (1.) The "British Indian Extension," from Madras to Singapore, with a share capital of £460,000. (2.) The "British Australian," from Singapore to Australia, with a share capital of £540,000. (3.) The "China Submarine," from Singapore to Hongkong and Shanghai, with a share capital of £525,000. The combined share capital of these three companies amounted to £1,525,000. On their amalgamation the united share capital, by a well-known process of "watering" to the extent of £472,500, was increased nominally to £1,997,500. The united company, since known as the Eastern Extension, Australasia, and China Telegraph Company (Limited), has been exceedingly prosperous; it has paid 7 per cent. on the enlarged capital, equal to 9 per cent. on the original capital. An examination of the published statements establishes that it has in addition expended out of the profits earned no less a sum than £1,571,540 on extensions and other productive works, and there remains unexpended and undivided to-day a reserve of surplus profits amounting to £804,193. These figures establish that the Eastern Extension Company has become a remarkably profitable investment. It regularly pays good dividends, but the dividends are no guide to the profits made. It holds in reserve undivided profits far exceeding in amount the whole value of its cables between Asia and Australia. The accounts of the company for 1896 and the first half of 1897 show that the net profits actually earned during these periods amounted to 13 per cent. on the present capital, and 17 per cent. on the capital prior to its being watered. The company is unwilling to have this state of affairs changed. They know perfectly well that the telegraphic traffic is steadily increasing, and that as the traffic grows the profits will become still greater. It is easy, therefore, to understand why the company has never viewed with friendly feeling the proposed Pacific cable. Its managers are not willing to divide the business with the new line. They must retain it entirely in their possession. They have secured a rich monopoly, and their desire is to make it even more profitable and to strengthen and perpetuate it.

The Pacific cable has been projected in no spirit of hostility to any company or to any country. It has been advocated as a means of extending to the whole Empire the advantages derivable from the geographical position of the Dominion. Canada offers the connecting-link in an Imperial chain of telegraphs encircling the globe. When the project is completed it will bring the Mother-country into direct electrical connection with every one of the great possessions of the Crown in both hemispheres without touching the soil of any foreign Power. Thus it cannot fail in a high degree to promote Imperial unity. Indeed, it is difficult to conceive how a perfect union or any union of the whole is possible without union between the parts. The whole Empire is in strong sympathy with the aims and aspirations which a few years back were limited to a few men of advanced thought. The historical event of last June has shown to the world that "the British people are one people animated by one spirit." It is recognised that we are approaching the period when new relations may be established between the United Kingdom and those younger British communities beyond the seas, known in past history as colonies, but which are passing from colonial tutelage to a higher national status. In order to promote these closer relations, what is more desirable, what more necessary, than that each and all be connected by the appliances which art and science have devised? Canada stands first among the British communities of the outer Empire. Scarcely second to Canada we look forward, in no long period, to welcome the kindred Dominion of Australia comprising under one federal Government half a dozen colonies, each possessing great potentialities. What more in harmony with the spirit of the British people than that Canada and Australia be brought in close communion? Is it not indispensable to vital public interest that those two great

units of the Empire—the island continent in the South Pacific and British North America—should possess the means of instantaneous communication one with the other?

The proposition of the Eastern Extension Company submitted to the Conference of Premiers has no such purpose in view. Its object is, indeed, the very opposite. While the consolidation of the Empire demands that the Queen's subjects in Canada and Australasia shall possess all the advantages which the closest telegraphic connection can effect, the policy which animates that company would cause these communities to remain severed. Is such a policy to be commended? Does not the Eastern Extension Company, when persistently exercising its manifold and widely ramified influence to keep Canada and Australia disunited, assume an attitude of hostility to both countries and to Imperial unity?

In the interests of the Eastern Extension Company the Pacific cable has been declared to be impracticable; its cost has been greatly exaggerated; it has been denounced as a work which could not be maintained without burdensome subsidies; it has been stigmatized as inimical to telegraphy and trade; and it has been decried and misrepresented in every possible manner. The explanation is to be found in the fact that the company is unwilling to relinquish its monopoly, and to rest satisfied in the future with a reasonable return for capital invested. On this point the writer is tempted to quote a single paragraph from his address at the Colonial Conference of 1894, as given in the proceedings (page 85): "The progress and well-being of Canada, Australasia, and the Empire cannot be retarded in order that the lucrative business of a private company may remain without change. Even if the chairman of the Eastern Extension Company succeeded in converting us to his commercial ethics, that the profits of the monopoly he represents must be maintained inviolate, it does not follow that the project of a Pacific cable would not be carried out in some form, even if Canada and Australasia abandon it. There are, indeed, unmistakable signs that a Pacific cable may shortly be carried out by France and the United States. We all know that France has already completed a section of 800 miles at the southern end, and the United States has recently expended \$25,000 in making an elaborate survey of about one-third the whole distance from San Francisco (to the Hawaiian Islands). With a rival line in foreign hands, it is easy to see that the Eastern Extension would gain nothing, while the Empire would lose much."

With respect to the objections raised by the Eastern Extension Company, they have been completely refuted. The very best evidence shows beyond all question that the project is perfectly feasible, that the cable should be established as a State work, that so established the revenue from business obtainable will be ample to meet every charge, including working-expenses, maintenance, renewal, interest on cost, and sinking fund to replace capital; that, in fact, the cable can be established in the most satisfactory manner, and that all its advantages can be attained without any cost whatever to the taxpayer. That the prospects are of this character is attributable to these facts, viz.: (1.) As a State work, the capital employed would be obtained at the lowest possible rate of interest. (2.) The capital would be limited to the necessities of actual expenditure in establishing the work; there would be no possibility of enlarging the capital account by adding "promotion expenses" or by "watering stock" in any form. (3.) No dividend would require to be declared or bonus paid. Revenue would only have to meet ordinary charges, including interest on the actual cost at a low rate, possibly  $2\frac{1}{2}$  per cent. (4.) Remunerative traffic which would be controlled by the Australasian Government already exists. (5.) Such traffic is continually growing, and it is difficult to assign a limit to its growth. (6.) The facilities created and the reduced charges would open up a new and profitable business across the Pacific which would be subject to the new line.

Such being the case, the question may be asked, is there any reason other than the opposition of the Eastern Extension Company why the establishment of this important national work should be farther delayed? It must be admitted that the Pacific cable in operation would put an end to the monopoly of the Eastern Extension Company, and diminish the immense profits it enjoys. As, however, less than half the whole traffic would prove remunerative to the Pacific cable, there would remain ample business to the company to yield a good return for the capital invested.

In the memorandum laid before the House of Commons last July by the Secretary of State for the Colonies it is distinctly indicated that, while the Home Government is willing to co-operate with Canada and the Australian Colonies, the Imperial authorities are unable to see the way to take the initiative, and that they "now await definite proposals from the colonies interested before proceeding further in the matter." It unfortunately happens that the Australasian Colonies remain under the disadvantage of being disunited politically, and they are not all equally in favour of the Pacific cable, Western Australia and South Australia being somewhat in sympathy with the Eastern Extension Company. New Zealand, New South Wales, Queensland, and Victoria desire to have the cable laid on the Canadian route. As the traffic to make it a profitable undertaking would have its source chiefly in these colonies, and, moreover, the land-lines within each colony are owned by each respective Government, they have it in their power to control the trans-Pacific telegraphic traffic to the extent required to make the cable a profitable undertaking. At this distance it is not easy to understand why these four colonies do not agree to take some definite line of action. It is now close on six months since the Premiers met in London, and as far as known they have not seen their way to agree to any joint proposal, owing doubtless to unexplained local difficulties. Under these circumstances it is not improper to consider if there be any duty or obligation resting on us in Canada. The Dominion is now looked up to as the elder brother in the British family of kindred nationalities. If as Canadians we have faith in our destiny as no inconsiderable element of the great Empire, are we not called upon again to take the initiative? The Mother-country awaits a proposal. It cannot well come from disunited Australasia. If we are to be brought within speaking-distance of the kindred communities in the southern seas the first impulse must come from ourselves. Shall the opportunity which circumstances have presented be seized, and another proof given to the world that "the Canadian Government and people are determined in all ways to promote Imperial unity?"

SANDFORD FLEMING.

MY DEAR SIR,—

Ottawa, 14th April, 1898.

Referring to the conversation we had this morning, and agreeably to your request, I submit for your further information the following explanations respecting the present position of the projected Pacific cable:—

After you left for England early in March the British Empire League held its annual meeting on the 10th ultimo. The subject was discussed at length, and resolutions were passed pointing out,—(1.) That the telegraph-connection of Canada with the Australasian Colonies by an all-British cable is of the utmost importance to Imperial unity; that such connection would not only foster trade and advance the common interests of the Dominion and the Empire, but be of special value to Canada and Australasia at a time when affairs on the shores of the Pacific are engaging the attention of the world to an extent that may before long involve serious international complications. (2.) That the cable business between Australasia and the Mother-country is enormous and steadily increasing, and it has been ascertained that if less than half the traffic be transmitted by way of Canada it would yield a revenue sufficient to make the Pacific cable, as a State undertaking, a complete commercial success. (3.) That the Australasian Governments have it in their power to furnish traffic to the Pacific cable to the extent required to make the new line self-supporting without involving any charge on the public exchequer. (4.) That events and circumstances imperatively demand that the Government of the Dominion should continue to press the matter to completion, in order that the interests of the Empire may not suffer.

The meeting, after discussion, unanimously resolved, "That the Government and Parliament of Canada be respectfully urged to take such action as may be necessary to secure the early commencement of the Pacific cable, and lead to the commencement of this great Imperial connecting-link." It was further resolved that a committee of the League be appointed with instructions to wait upon the Government for the purpose of presenting the views expressed, and urging the necessity of prompt action in the matter.

The committee appointed having in pursuance of the resolution waited on the First Minister, a suggestion was submitted to him, which appeared to be favourably entertained. It was suggested that possibly the best means of establishing the cable as a State undertaking would be through the instrumentality of a "Pacific Cable Trust" created by the several Parliaments concerned. The trust to be duly empowered to raise the required capital, providing for the replacement of the loan by a sinking fund; and, with respect to this, it may be mentioned that investigations by the Imperial Committee in 1896, and since the Imperial Committee reported, establish beyond all question that the revenue resulting from the co-operation of New Zealand, Queensland, Victoria, and New South Wales with Canada would fully provide for the extinction of the original loan. The proposed "Pacific Cable Trust" would be a small Board on which the associated Governments would be represented. Every detail would be left to this Board; it would be empowered to do everything necessary to lay the cable, to work it for commercial purposes, to collect the revenue and account for its proper expenditure. It is not necessary at present to say any more. It will be obvious to you that, from the ample remunerative traffic which would be secured by the co-partnership arrangement with the four Governments controlling it, the cable trust would be in a position to meet every engagement and place in reserve year by year sufficient provision for the replacement of capital. By this instrumentality the Pacific cable may without difficulty be laid and worked for the common advantage without cost to the taxpayer and without causing any addition to the public debt. In addition to the action taken by the British Empire League, several Boards of Trade in the Dominion considered the question and reached similar conclusions. The resolutions passed by them have been submitted to the Government from time to time. By the last mail from Australia I have received information from official and private sources of an important character.

The Eastern Extension Telegraph Company, the great opponent of Canada in the matter, has an agent actively engaged in these colonies. He is continually using the strongest possible influence to divert attention from the Canadian route, and is taking every means to obtain from the Australasian Governments a subsidy for establishing a rival line by way of the Cape of Good Hope, with a proviso that no assistance be granted to any other line for a period of twenty years. I append a memorandum which refers to this and other points, and I especially invite your attention to that part dealing with "hostile projects."

I append copies of communications which I have received from the Premier of Queensland, dated the 19th February, 1898, and from the Premier of New Zealand, dated the 16th March, 1898. You will see that the Governments of both colonies are strongly in favour of the Pacific cable, and the wish is expressed "that no effort will be spared on the part of Canada to insure the accomplishment of the scheme." Other letters which I have received within the last few days are unofficial. I may, however, state that they point out very decidedly that New South Wales and Victoria will be equally ready to join in the undertaking provided Canada moves in the matter promptly. I learn that about the time the last mail left Sydney a resolution was adopted at a meeting of Premiers held at Melbourne fully confirming this statement. The Premier of New Zealand was not present, but his letter appended speaks for itself. The Premiers of Queensland, New South Wales, Victoria, and Tasmania spoke for their Governments, and it would appear that they are all looking to Canada to take definite action. It is noteworthy evidence of the importance which must be attached to this matter that, while the Pacific cable was being discussed at the meeting of the British Empire League and at the conference with the Canadian First Minister, in Ottawa, precisely at the same time it engaged the attention of the Premiers of the Australian Colonies in Melbourne, and both circumstances were reported side by side in the London Press the following day.

Notwithstanding the widespread interest awakened, and the publicity given to it, I have ventured in the following memorandum to point out that there is danger in delay. Let me, there-

fore, again urge the necessity of action of some kind by your Government. If Canada now moves the cable will be assured. As I have repeatedly stated, this great Imperial connecting-link will cost the taxpayer nothing, and it will add nothing to the public debt.

Hon. R. R. Dobell, Ottawa.

Yours, &c.,  
SANDFORD FLEMING.

*Letter from the Premier of Queensland.*

DEAR SIR,—

Chief Secretary's Office, Brisbane, 19th February, 1898.

With reference to your letter of the 3rd of January ultimo, receipt of which I have already caused to be formally acknowledged, in which you were good enough to forward, for my information, a copy of a letter addressed by you to Sir Wilfrid Laurier, Prime Minister of the Dominion of Canada, on the subject of the Pacific cable, which I have perused with much interest. I now beg to state that the Government of Queensland have in no sense altered their views as to the advantage to be derived by the Australasian Colonies, and the Empire generally, from the construction of the proposed Pacific cable connecting Australia with Great Britain *via* Canada. The matter was, as you are aware, discussed at the conference between the Right Hon. the Secretary of State for the Colonies and the Premiers of the self-governing colonies held in London last year. It was with some surprise I heard Sir Wilfrid Laurier announce during the course of the proceedings that his Government was not yet prepared to give practical effect, so far as the Dominion of Canada was concerned, to the proposal that the colonies interested should guarantee their shares of the cost of the construction of the cable. I am pleased, however, to be able to give you my hearty assurance of our entire sympathy with the movement in favour of this important national undertaking, and I trust that before long it may be possible to take some definite steps in the direction of executing what is by Queensland regarded as not only a very desirable, but a very practical scheme.

Believe me, &c.,  
HUGH M. NELSON.

*Letter from the Premier of New Zealand.*

SIR,—

New Zealand, General Post Office, Wellington, 16th March, 1898.

Referring to my letter of the 12th ultimo, acknowledging receipt of copy of your letter to Sir Wilfrid Laurier on the subject of the Pacific cable, the Right Hon. Mr. Seddon now directs me to say, in reply, that he hopes to hear that no efforts will be spared on the part of Canada to ensure the accomplishment of the scheme for a cable from Australia to the United Kingdom by way of the Pacific. The New Zealand Government strongly favours the Pacific cable.

I have, &c.,  
W. GRAY, Secretary.

Sir Sandford Fleming, Ottawa, Canada.

No. 15.

FURTHER PAPERS OF THE CANADIAN HOUSE OF COMMONS.

HOUSE OF COMMONS DEBATES: THIRD SESSION—EIGHTH PARLIAMENT.—DEBATE ON THE PACIFIC CABLE.—OTTAWA, THURSDAY, 26TH MAY, 1898.

*Mr. Casey:* Before that motion is carried, Mr. Speaker, I wish to bring a matter before the House which I consider is of sufficient importance to justify our devoting a little time to it, even at this late period of the session. I need not say that what I shall bring up is not a motion of want of confidence in the Government, nor even any attempt to find fault with the Government. It is a matter on which I hope to elicit the opinion of the House to some extent, and possibly the opinion of the Government: a matter which I consider to be of Imperial importance. I refer to the question of the laying of a Pacific cable to connect Vancouver with Australasia. It will be within the memory of all of us that this subject has occupied the consideration of colonial Conferences, of colonial Governments, and of this House at different times. Not to go further back than the first Intercolonial Conference of 1887, held in London, we know that resolutions were passed there favourable to the laying of such a cable. Subsequently, when the then Minister of Trade and Commerce (Sir Mackenzie Bowell) visited Australia, negotiations took place which led to the summoning of the Intercolonial Conference in Ottawa in the early summer of 1894, where that question was again considered, and the laying of the cable approved by resolution. I shall not detain the House by reading these resolutions in detail, but I may say they were to the effect that the Imperial Government should be asked to consider as to what aid they would give, and that the Canadian Government should be asked to ascertain what such a cable would probably cost. As a result of that conference, in the year following the Government of this country called for tenders, and the lowest tender for the construction of that cable, and its maintenance for three years by the contractors, including all possible risks during the making and laying of the cable, amounted in round numbers to about one and a half million pounds sterling. None of these tenders were accepted, as they were invited merely for the purpose of ascertaining about what such a cable would cost. The matter was not concluded after these investigations, but early in 1896 an Imperial Committee was called together in London to consider the subject, at which Sir Donald A. Smith (now Lord Strathcona and Mount Royal) and Sir Sandford Fleming were appointed to represent the Canadian Government; there being representatives present from the Imperial Government and from the Australasian colonies. That Committee held its sittings through the summer and autumn of 1896, and at great length investigated all questions connected with the cable, and established not only the practicability of a cable being laid in the waters in question, but also that the cost would be

moderate and the traffic large. The report of that Committee has never been published, for some reasons which are known only to the official mind of the Colonial Office in England. For reasons of policy they have objected to the publication of the report of that Committee. However, the Canadian representative and Sir Sandford Fleming—who did not sit as a member of the Committee, having stepped out and acted as consulting expert only, because the other colonies only sent one representative each—the Canadian representatives reported to the Canadian Government their own proceedings in connection with that Committee. Some considerable time ago I obtained an address from the House asking for the report of that Committee, and the reports of the Canadian representatives thereon. The Secretary of State reports in the return which was brought down yesterday: that “the report itself asked for is held as confidential under instructions from the Imperial authorities not to publish until permission is given to do so.” The reports of the Canadian representative and of Sir Sandford Fleming have been brought down in this return, which I shall certainly not read to the House at this time, although I hope that it will be printed for the information of the public on this very important matter. I will, however, occupy a few moments in reading a letter received from Sir Sandford Fleming by myself, in response to a request of mine for a concise and brief statement of the whole question. The letter is as follows:—

DEAR MR. CASEY,—

Ottawa, May 26th, 1898.

I am very glad to reply to your inquiries. I have recently received many communications from Australia, all pointing to the great interest taken in the Pacific cable, and the desire on the part of these rich and growing communities, seated in that favoured region of the globe, to cultivate close relations with Canada. The communications received embrace official and private letters. Among the former the following extracts from letters received from the Premiers of Queensland and New Zealand may be taken as illustrations.

The Premier of Queensland states in a letter of the 19th February, 1898, that his Government “have in no sense altered their views as to the advantages to be derived by the Australian colonies and the Empire generally from the construction of the proposed Pacific cable, connecting Australia with Great Britain by way of Canada.” He is pleased to be able to give his “hearty assurance of entire sympathy with the movement in favour of this important national undertaking, and trusts that before long it may be possible to take some definite steps in the direction of executing what is by Queensland regarded as not only a very desirable, but a very practicable scheme.”

The Premier of New Zealand, in a letter of the 16th March, 1898, expresses the hope “that no efforts will be spared on the part of Canada to ensure the accomplishment of the scheme for a cable from Australia to the United Kingdom by way of the Pacific.” He adds: “The New Zealand Government strongly favours the Pacific cable.”

In the same month (March) the Premiers of New South Wales, Queensland, Victoria, and Tasmania, met in Melbourne, and agreed on behalf of those colonies to supply one third of the cost of the Pacific cable if Canada and Great Britain will co-operate with them. New Zealand was not represented at this Conference, but the letter of Mr. Seddon, the Premier, above quoted, indicates that the undertaking is strongly supported by his Government. This fact he communicated to the Conference of Premiers by telegraph.

The cost of the cable has been ascertained to be under £1,500,000, and the most careful experts have calculated that an annual gross income of £150,000 would more than meet interest, sinking fund, working expenses, and maintenance. In the year 1896 the cable traffic between Australasia and Europe, according to Government returns, reached 2,326,984 words. If we reckon the traffic at 3s. a word (the rate between Australia and Europe is 4s. 9d. per word), we have a gross revenue of £349,047, showing very clearly that, even assuming the cable business will never exceed that of 1896, there would be amply remunerative business for the Pacific cable. But the cable business is progressive. The following is a statement taken from the Government returns of the number of words transmitted in each year from 1891 to 1896. The traffic for last year (1897) has not yet been received. Total words transmitted, in 1891, 1,110,869; in 1892, 1,321,412; in 1893, 1,401,293; in 1894, 1,323,243; in 1895, 1,948,630; in 1896, 2,326,984. This establishes that from 1891 to 1896 the cable business has more than doubled, and, in view of the stimulating effect of a new line of communication, it is reasonable to estimate that the gross cable business in 1901 will not be less than 4,000,000 words. As 1,000,000 words at 3s. a word will produce £150,000, the revenue required to cover every charge against the Pacific cable, it is evident that if the Pacific cable obtains one-quarter of the Australian-European traffic it will be a paying concern from the first year it can be put in operation.

To my mind there is no reason to apprehend that the Pacific cable will not obtain far more than one-quarter of the entire cable business. The Australian land lines are public property, managed by the Post Office Departments, and each Government will have the power to direct traffic over the Pacific cable, so as to make it remunerative. The cable business takes its origin chiefly in New South Wales, Queensland, Victoria and New Zealand, and it is obvious that if these colonies have a proprietary interest in the undertaking its complete financial success will be assured. New South Wales, Queensland, and Victoria have agreed through their Premiers to become responsible for one third of the whole cost. It is understood that the Imperial Government will be willing to bear one-third. There remains one-third to be borne by New Zealand and Canada, in proportions to be agreed upon.

These facts and explanations clearly establish that whatever share of the co-partnership may be assumed by Canada the liability will be merely nominal. As the existing traffic alone, without taking into account the new business certain to be created, would be more than sufficient to cover working expenses, maintenance, interest, and sinking fund to pay off the original loan, all increase of business and all new business to be developed between Canada, the United States, and Australia would swell out receipts in a few years so as to admit of a reduction in charges on messages much below present rates, by which great advantage to the public would result.

It has been proposed to establish this national work through the instrumentality of a Pacific cable trust, to be created by the several Parliaments. This trust to be empowered to raise by loan the required capital, providing for its replacement by sinking fund. The loan to be guaranteed by the associated Governments in agreed proportions. The Pacific cable trust would be a small Board on which the associated Governments would be represented. As empowered by statute it would do everything necessary to establish and operate the line, collect the revenue, and properly account for it. By this means a great national undertaking, designed to promote trade and bring the outer Empire into electric contact, would be easily established without any actual addition to the public debt or any annual charge on the tax-payer.

George E. Casey, Esq., M.P.

Yours, &c.,

SANDFORD FLEMING.

It may be asked, Sir, why, if this enterprise is so sure to pay, it should not be undertaken by a private corporation. The answer is, that if it were undertaken by a private corporation, the provincial Governments in Australasia, which have been referred to, would not be bound by their own interest to send over it the business necessary to make it a paying concern. That is a very sufficient answer in itself. It would have to compete for its business with the Eastern Extension Cable Company, a tremendously wealthy and influential corporation, in trying to get into the good graces of the provincial Governments which control that business, and it is easy to understand that a new company could not compete successfully with an old, influential, and wealthy one. In the second place, the capital could not be obtained at nearly as reasonable rates by a company as by a cable trust, with the guarantee of the different Governments. The ordinary rate of profit expected by investors would certainly range from 5 to 8 per cent., or probably more, whereas the rate of

interest at which money could be borrowed on a Government guarantee would be between  $2\frac{1}{2}$  and 3 per cent. That difference is enough to make the distinction between a paying and a non-paying investment. As to the responsibility incurred by the Governments which guarantee this loan, I think Sir Sandford's statement, which he assures me is taken from the Government blue-books of these colonies, is sufficient to make it appear that the responsibility would be purely nominal. I might instance the case of the Intercolonial Railway. When Canada proposed to build that road the Imperial Government, whose credit was so much better than ours, guaranteed a very considerable amount of the bonds, and we got the money at a lower rate of interest than we otherwise could have done. Yet the Imperial Government has never had to pay a cent of the interest on those bonds. When we have a case like this, in which it is clear that the other parties who would go into the enterprise of laying the cable have it in their power to direct over it a paying stream of traffic, and would be interested in doing so as guarantors of the scheme, it seems to me very clear that neither this country nor any of the other colonies would ever have to pay a cent towards liquidating the cost of that cable. Why should Canada take the initiative in this matter? In the first place, because she is the most important colony and most interested in this cable of any except Australia. In the second place, because Canada has acquired already what it is now fashionable to call the hegemony of Greater Britain. She is the most important in the councils of the greater Empire which lies outside the British Islands. Since the day of the Jubilee celebration, I think that cannot be doubted. Ever since then it is admitted by Englishmen that Canada is not only the leader of the colonies, but the leader of the Empire, in many questions of policy, both internal and external. Canada has already gone a long way on certain paths which are intended to promote, not only her own prosperity, but the unity of the Empire and the mutual co-operation of its different members. It is eminently proper, therefore, that Canada should take the initiative in this matter. I do not speak now as if the initiative remained to be taken. Canada has taken the initiative in discussing this matter and obtaining the necessary information with regard to it. What is required is that she should now take the initiative by being the first to lay down a definite scheme to carry out the plans that have already been fully discussed, and take up her share of Imperial responsibility in this connection. The commercial advantages to Canada of this scheme will be great. We have had for some years a line of steamers plying between Vancouver and Australia, but only within this year that line has ceased to pay and has had to be taken over by another company. Why? Simply because there has not been direct telegraphic communication between Canada and Australia. Where there is no direct telegraphic communication, and no ports of call having telegraphic connections between points so far distant as Vancouver and Australia, where ships can call for orders, commerce is sure to languish as it has in this case. Still more from the point of view of the safety of the Empire, and thereby indirectly our own, this cable would be an agency whose importance cannot be exaggerated. In these days of wars and rumours of wars, and of cutting of cables by one of the combatants to embarrass the other, the necessity of a cable with its terminals on British territory is very clearly apparent. This proposed cable line, according to the most feasible route, will start from Vancouver, and then by way of Fanning Island and Fiji to Norfolk Island, from which it will fork to New Zealand and Australia. The total length will be something over 7,000 miles. The committee in England have fully established the feasibility of laying a cable in these waters at a reasonable cost. Under all these circumstances I am sure that we are in a position to ask the Imperial Government to drop the veil of secrecy which has been laid over the matter at present, and to come out fully and frankly and meet ourselves and the other colonies half way, not only in promising support to this scheme, but in maturing and carrying out the project. There is urgency in the matter at present for two reasons. In the first place, this Eastern Extension Company has been trying to obtain the assistance of the Australian colonies to another route, by way of the Cape of Good Hope, from Australia to England. In the second place, the French Government has a cable from New Caledonia to New Zealand, and steps have been taken to construct another link in a route which would connect New Caledonia with Hawaii, and thence by the American cable with San Francisco. If either of these schemes took practical form, the proposal for the Canadian cable would be at an end, because either of the others would serve the purpose of Australia, if not ours. A profitable and growing trade between Australia and Canada cannot be accomplished by any other means than by this electric communication. We should then be the warehouse for European goods going to Australia and Australian goods coming to England over our great national highway, the Canadian Pacific Railway. I do not bring up this question with any idea of forcing the hand of the Government or urging it to say anything definite in the matter to-night, but in the hope that it will promote such a discussion as will give the Government some idea of the feeling in the House and country, and that there will be such discussion in the country, even in these days of interesting war news, as will call public attention to the matter, and enable the people to see that it is a national Canadian, as well as Imperial, work of great importance, and deserving of more activity on our part. I do not know that I have anything further to add to what I have already said, and to the remarks I have quoted from the greatest living authority on submarine cables, Sir Sandford Fleming. I could give interesting details from the various papers brought down, but, although they would add to the interest of the subject, they would not add to the pleasure of the House to-night. I hope to hear from both sides on the question. I am sorry that some honourable gentlemen are not present whom I would desire to see here to-night. I refer to members from British Columbia on this side of the House—I see one on the other side—who are, to my knowledge, in sympathy with this scheme, but I am forced to bring it on in their absence on account of the nearness of prorogation.

*Sir Charles Tupper.*—I waited, Mr. Speaker, before rising, in the belief that some member of the Government would, in response to the very strong appeal just made by the honourable member for West Elgin (Mr. Casey), favour the House with the position which the Government propose to



take on this very important question. I have not had an opportunity of reading the papers that have been placed on the table, and, from what my honourable friend says, I am afraid I would not derive a great deal of information if I had.

*Mr. Casey.*—Yes, the report of the Canadian Commissioner is pretty full.

*Sir Charles Tupper.*—I speak of the matter so far as the views of the Government are concerned, which is an important point; and, from what fell from my honourable friend who has just gone over this subject with so much care and ability, I am afraid I should not have learned a great deal as to the attitude of the Government. But I may say that I am afraid that the Government have scarcely realised our just expectations in regard to this very important matter. The question was taken up with great zeal and great ability long ago by Sir Sandford Fleming, who gave the subject attention, not from the promoter's point of view, because he never dealt with the subject from that standpoint at all, but entirely from the higher point of view of what he could do—and it was a great deal—to bring such facts and evidence to bear upon the question as would commend it to the consideration of the Government, and lead to its being taken up by the Government of Canada and other countries interested with a view to its accomplishment. I do not intend to say a single word with regard to its importance. The honourable member for West Elgin (Mr. Casey) has pointed out that probably the failure of those who undertook the establishment of a line of communication between the great island continent of Australia resulted, to a large extent, from the want of that direct telegraphic communication which so greatly facilitates commercial transactions. I will now give the House a little idea of the position in which that question was when I resigned the position of High Commissioner in London. The great Conference that was held of the Australasian representatives and the representatives of the British Government meeting here with the representatives of Canada gave a great impetus to this project. After consideration of the subject that Conference arrived at a practically unanimous resolution in favour of the question being taken up and pressed upon the consideration of Her Majesty's Government. Lord Jersey, who represented the Imperial Government at that Conference, attached very great importance to this project, and dealt very ably with it in his report to Her Majesty's Government upon the Conference itself. When the present Government came into power I made a very strong appeal, under direction of the Government of Canada, to the Right Hon. Mr. Chamberlain, the Colonial Minister, to take up this question of the Pacific cable connecting Canada with Australasia, and that right honourable gentleman, having given a great deal of attention and careful consideration to the subject, was good enough to receive a deputation. On that occasion I was accompanied to the Colonial Office by the representatives in London of all the Australasian Colonies, including New Zealand, with the exception of the representatives of South Australia and West Australia. We never expected to have the active support of these provinces, for the reason that they had built a very long and expensive line of telegraphic communication across the country connecting with the Eastern Extension Company, and the carrying-out of the project of cable-communication on the Pacific from Vancouver to Australia would tend very much to take away the business upon which this line constructed by South Australia and West Australia depended for its maintenance. I may say that when on the occasion on which, under instructions of the Government of Canada and of all the Australian Governments, except the two I have mentioned, we waited upon the Right Hon. Mr. Chamberlain with a joint request that a Commission should be appointed by Her Majesty's Government for the purpose of taking up the question as to whether it was desirable that this Pacific cable should be established, and in what form it was most likely to be successfully carried out, the Colonial Minister at once warmly entered into the subject, and, in response to our application, agreed promptly to issue a Royal Commission to invite representatives from Canada and from Australia to meet in England for the purpose of conferring with Her Majesty's Government on that subject. And I may say—and it is a very important statement that I am about to make—that Mr. Chamberlain, who is noted not only for his great ability, but for his thorough knowledge of financial questions, stated to the delegation or representatives from Canada and Australia that, having given to the subject the fullest and most careful consideration in his power, and in the light of all the information that could be brought to bear upon it, he had arrived at the conclusion that the accomplishment of the Pacific cable from Vancouver to Australia would not involve, practically, any financial responsibility. He reached this conclusion not only from the evidence that had been submitted by Sir Sandford Fleming, to which he had given careful attention, but from the stronger and more complete evidence afforded by the invitation for tenders by the Government of Canada at the request of the Ottawa Conference. This invitation resulted in obtaining from one of the strongest firms of Great Britain, the Indiarubber and Gutta-percha Cable Company and Works, a tender for the construction and maintenance for three years of the cable. This not only established that the calculations that Sir Sandford Fleming had made—and very elaborate calculations they were—were sound, but that the terms on which one of the strongest cable companies in Great Britain was prepared to carry out the work was nearly a million less than Sir Sandford Fleming had estimated. So that, instead of having been too sanguine, instead of having overestimated the results of his labours, it was found by practical test that his figures were outside figures, and that he could undoubtedly have constructed it at a much lower rate than he had estimated. Not only that, but, as I have said, the Colonial Minister himself declared that, having gone into the subject with great care, he had arrived at the conclusion that this great work in which Her Majesty's Government were most deeply interested could be carried out by the joint operation of Canada, Great Britain, and Australasia, without practically involving any other material financial responsibility whatever. Now, Sir, that was an enormous point gained. A Commission was appointed, and, as the House knows from the papers that have been laid upon the table, no definite conclusion was arrived at. A change of Government occurred about that time, and an alteration was made in the Commission, although I am glad to know that the present Government availed themselves of the invaluable services of Sir Sandford Fleming in this matter, as the previous Government had done, but with

the result that, while we all looked forward to this great Jubilee occasion as one on which we had every reason to believe this important work would be finally arranged, on the contrary, for some cause, to me unaccountable, the work was not proceeded with, but suffered a decided set-back. The honourable member for West Elgin (Mr. Casey) has invited the Government to seek Her Majesty's Government to remove the veil of secrecy and let us see behind the scenes, let us learn why it is that in view of this great work, so vitally important to us and to Australia, equally important to Her Majesty's Government and to the Empire itself, as recent events have strikingly evidenced—why it is that this matter should be apparently in abeyance. Now, Sir, I hold in my hand a paper to which I would like very well to have drawn the attention of the First Minister, who, I am sorry to see, is not in his seat to-night; it contains a statement made apparently with a good deal of authority, and which throws a good deal of responsibility, in regard to the present position of this important question, upon that right honourable gentleman. I hold in my hand a copy of the *London Standard* of the 26th July, 1897. I may say, for the information of some members of the House who may not be aware of the fact, that the *London Standard* is practically the organ of Her Majesty's Government. I do not know a paper published in London that is looked to with the same confidence as the *London Standard* to ascertain the views and sentiments of Her Majesty's Government. This paper professes to give, on what purports to be the best authority, the report of an interview between Mr. Chamberlain and the colonial Premiers. We have had since that a portion of the details laid by that right honourable gentleman himself upon the table of the House, but this inside view of the interview gives us some information above and beyond anything that is to be found in the statements laid upon the table of the House of Commons. I may say that from the very moment that this question of a Pacific cable was mooted it met with the most untiring hostility of the Eastern Extension Cable Company, of which Sir John Pender, a very able man, was the founder, a man of consummate ability, and whose arms were long and far-reaching. I say from the outset this Pacific-cable project met with the determined hostility of the Eastern Extension Cable Company for the obvious reasons that they had practically a monopoly of communication with the great islands of Australasia, and disliked any competition from another and superior line of communication, and one more free from interruption than the line that now exists. Well, it appears that in their untiring efforts to defeat this scheme they brought forward and placed before the Cable Commission in London an alternative scheme. I will now read a report of what professes to be a result of the conference between Mr. Chamberlain and the colonial Premiers:—

The Conference left the Pacific cable-scheme in mid-air, and it is very unlikely that anything more will be heard of it for a considerable time. The position was entirely changed by a proposal by the Eastern Extension Telegraph Company to lay an all-British line from Western Australia across the Indian Ocean to Mauritius, thence connecting with the Cape and St. Helena and Ascension. Under any circumstances, Western Australia and South Australia were opposed to the Pacific cable—[for the reasons I have mentioned]—which would divert traffic from their land-lines, and Victoria was indifferent. New South Wales, Queensland, and New Zealand were, by reason of their geographical position, prepared to subsidise the Pacific line, and if the Home and Canadian Governments had been willing to pay their share, no doubt the scheme would have been carried out. But the Conference soon discovered that the Imperial Treasury was very unwilling indeed to subsidise the line, while Sir Wilfrid Laurier indicated that he mistrusted the estimates of cost, revenue, and maintenance which had been submitted by the projector, and was not prepared to pledge Canada to bear a share of the burden.

Now, Sir, I regret that the right honourable gentleman is not here to give to this House some explanation of the grounds upon which he should have questioned the conclusion of the projector, for that could be no other than Sir Sandford Fleming, as he was the party who had put forward all the data upon which this question was dealt with. I would like to know why he should throw doubt and discredit upon Sir Sandford Fleming's calculations of the cost, when they had been subjected to so severe and important a test as that of being submitted to competition between the great cable companies, and it had been found that, instead of those calculations being unworthy of confidence, he had erred upon the safe side of largely overestimating the cost beyond what it was found an important cable firm in London were prepared to construct the work. If that be a correct statement, I regret very much that such doubts should have been expressed, or that any hesitation should have been expressed by Canada in regard to a matter that I look upon as very important not only to Canada and Australia, but perhaps still more important to the Empire itself. If Her Majesty's Government show a disposition, as here stated, to recede from the position of being prepared to bear a large and substantial portion of the risk, regarded as a very light one by the representative of the Imperial Government, Mr. Chamberlain, a very great change must have taken place in that right honourable gentleman's opinion from the time I had the pleasure of discussing that subject with him in connection with the delegates from all the colonies. I do not intend at this hour to occupy further time than to say that this is a question deserving the hearty support of the Government and Parliament of Canada. I believe it is all but demonstrated that it is of great importance to us, that it would make Canada the great highway and thoroughfare for a very large amount of the cable-communication between the great island continent of Australasia and Europe; that it would have insured us a position that would have been one of great value commercially, that it would have been attended with a very moderate charge, if any, on the revenues of the country, and at the same time have resulted in giving our geographical position that importance to which I think it is justly entitled. I hope the further consideration of this question will lead to its being promptly taken up by the Imperial Government, the Governments of Australasia, and the Government of Canada at no distant day, and that at no distant day we may see that which has been regarded with general favour and as a matter of great importance by all parties, except by those interested, and who have a direct interest, such as the Eastern Extension Cable Company has, in preventing its being carried out.

*The Minister of Trade and Commerce (Sir Richard Cartwright).*—I do not think it would be safe to accept the *Standard* or any other newspaper as accurately representing what may be the true position of this question. One thing I may assure the honourable gentleman, and that is that

up to a very recent date the Imperial authorities objected to bringing down any further information, and I am justified in saying, in obedience to that intimation, nothing further has been brought down. As to the question itself, no doubt the honourable leader of the Opposition and my honourable friend who has brought this matter under the consideration of the House are quite justified in saying that this is a very important enterprise, and under certain possible conditions it would probably be extremely desirable that the several parties concerned should take steps to bring it about. But as regards the people of Canada at large, with whom we are most concerned, while I am not disposed to say it is of no great consequence to them, I am disposed to say this: that of the three principal parties concerned they are, in my judgment, the least directly concerned. I think the great Australasian group beyond question are the most interested, and next to them, having regard to their enormous interests in the Pacific Ocean at large and in Australasia in particular, I think the Imperial authorities are most interested; and, while not disposed to deny that Canada has a distinct and material interest in promoting trade and commerce with the Australian Colonies, I think I am justified in saying that of the three parties we are the least interested, from a commercial point of view, at all events. Under these circumstances, and bearing in mind that Canada, in my judgment, has been called upon to contribute enormously in proportion to her resources to the building of a trans-continental railway across this continent, in regard to which I have always held the British Government ought to have contributed, and I think the honourable gentleman opposite, if I am not mistaken, was very much of the same opinion—

*Sir Charles Tupper.*—Hear, hear.

*The Minister of Trade and Commerce.*—It is no particular secret now that if we had been a little less precipitate in making an agreement for the construction of the Canadian Pacific Railway some thirty years ago, the British Government would have been compelled to have assisted largely in its construction. However, the whole burden fell on Canada. Canada, in carrying that out, in my judgment, rendered great service to the Empire, which has not been adequately acknowledged up to the present time, at all events, by the British Government. Under these circumstances, while I would not be disposed to refuse to take a reasonable share in this cable enterprise, I consider Canada should not be called upon to bear too large a proportion; and that, without entering into any very minute discussion to-night on the subject of the proposed cost and of the proposed revenue which may be obtained from various sources, we in this Dominion are justified in saying, both to the Australasian group and to Great Britain, that after all we should not be called on to contribute to it more than in accordance with our interest. Up to the present time the Government have not found it possible to come to an exact understanding with the other parties to the enterprise, although they have not abandoned the hope that negotiations may yet be carried out to a successful issue. I am not at the present time going to enter into any details about these negotiations, which would rather injure than promote the cause; but of two things the honourable gentleman opposite may rest assured: first, that we shall not lose sight of it; and, second, that we shall feel it our duty to see that Canada is not called upon to bear more than her proper proportion of the cost. It may prove, and I hope it will prove, when this matter is thoroughly brought before the Australian Colonies, and the proposal is placed before the people at Home, that the expectations formed by the gentlemen promoting this scheme are correct, there is reasonable hope that advances will speedily be made which will bring about the realisation of the honourable gentleman's desire. Up to the present moment, although these things are in the air, they are not fully crystallized, I am not in a position to come down to the House with any definite proposition on the subject. Moreover, though Canada is a country of great potential resources, the Dominion and this Government have undertaken a great many expensive operations up to the present moment, and our resources at this time, as we shall be reminded by speeches from honourable gentlemen opposite later on, are very fully engaged. I must say that we should be very careful in regard to entering into any immediate liability, although we may believe there is a reasonably good chance of being recouped within a moderate space of time. I do not want to deter any honourable gentleman who has taken an interest in the subject from giving the House and the Government the benefit of his views. Anything the honourable leader of the Opposition or his friends or our friends may choose to say will be carefully considered by the Government and receive due attention at their hands. We are not, however, in a position to bring down at this moment any suggestion as to the proportion of the enterprise we should undertake, and I hardly think it would be profitable to those who desire to promote this enterprise to enter into any discussion of that phase of the question. As to the general benefit that may follow, I do not dispute it. The only point I make is that, while it may be of interest to Canada, it is of very much more interest to the Australian group, whose inhabitants are wealthy people, quite as wealthy, and perhaps more so, than are Canadians as yet; and to the people of Great Britain, whose interest would be very largely served by having a second line of cable through British territory which would be practically inaccessible to any attempts that may be made by any foe at any time to interrupt communication.

*Mr. McNeill.*—I do not purpose to detain the House in reference to this matter, but I would like to call the attention of the honourable gentleman (Sir Richard Cartwright) to one fact in connection with the subject which he admits is one of very great importance, and that is that the emissaries of the Eastern Extension Telegraph Company are at present hard at work in Australia doing all they can to induce the Australian Colonies to give up their intention of supporting this project, so that delay now will be exceedingly dangerous. I would also call the honourable gentleman's attention to the fact that the present time seems to be singularly appropriate for urging this question upon the attention of the Imperial authorities. When every one must be alive to the enormous importance of telegraphic communication from one point of the Empire to the other, I should imagine that this was a time, if ever, when an effort should be made to bring this question home with the greatest possible force to the Imperial Government. I find that, in a memorandum

which was recently presented to the Imperial House of Commons by the Colonial Secretary, the Colonial Secretary said that the Imperial authorities were ready to co-operate; willing to co-operate, but that they would not take the initiative, as the initiative should come from the colonies interested. If that initiative is not taken, and if this matter is allowed to drift, the result might be that this hostile cable company may succeed in blocking this very important Imperial scheme altogether. I very much regret that there should have been the delay which has taken place in regard to it. I think it is only too true what was said by the *Standard* in reference to the action taken by our own Prime Minister in England, because I find that in a letter, a copy of which was placed on the table of the House last night, addressed by the Prime Minister of Queensland to Sir Stanford Fleming, this sentence occurs:—

The matter was, as you are aware, discussed at the conference between the Right Hon. the Secretary of State for the Colonies and the Premiers of the self-governing colonies, held in London last year, and it was with some surprise that I heard Sir Wilfrid Laurier announce during the course of the proceedings that his Government was not yet prepared to give practical effect, so far as the Dominion of Canada was concerned, to the proposal that the colonies interested should guarantee their shares of the cost of the construction of the cable.

It would seem, therefore, that the information possessed by the *Standard* is correct, and that really Sir Wilfrid Laurier's course in London last year had very much to do with the blocking of this most important Imperial work. It is very unfortunate that that should have been the case. From the best information that we can obtain—from the opinion of the Right Hon. Mr. Chamberlain himself, and from the opinion of many other experts—it would seem that this great Imperial work will not cost the people of Canada one cent; that it will not in any way increase the burdens of the people of Canada; that it will be a self-sustaining concern from the very beginning; and that all the Government of Canada will be asked to do will be to give a guarantee. No one has at all ventured to dispute that fact. Under those circumstances I do think that it is unfortunate that there should be any appearance of stickling for the exact proportion which may be guaranteed by Canada, by Australasia, and by the Mother-country. I believe that the benefit to Canada of the Pacific cable would be enormous, both commercially and as a matter of safety for the whole community. No portion of this cable will be laid upon foreign soil, and it will have this other great element of safety connected with it: that it will be a deep-sea cable—a cable that it will be exceedingly difficult for any hostile Power to reach and interfere with. In that respect it would be very different from the cables proposed to be laid by the Eastern Extension Company, which will be cables laid in shallow waters, and which might be readily interfered with. If through any untoward circumstances the people of this country should be deprived of the advantage which the construction of this cable would bring to them, it would be a very great pity indeed. I would venture to urge upon the Government in the strongest way possible that they should do all that they can do to expedite the negotiations, whatever they may be, that are being carried on at the present time.

Mr. Wallace.—I regret very much that the Government have not a more satisfactory statement to make with regard to this cable. Recent events have made it most imperative that some action should be taken in this regard. I have here a letter written by Mr. Parkin, Principal of Upper Canada College, than whom, I think, no one is more capable of giving an intelligent opinion upon the importance of this cable, both from a Canadian point of view and from the standpoint of a great national British work. Mr. Parkin's letter, which I will take the liberty of reading to the House, is as follows:—

Now for the Pacific Cable.—An Object-lesson which establishes its Utility and its Political Urgency.—Editor *World*: The events of the last few days have brought out with startling vividness some truths which a few thinkers have with pain and difficulty been trying to impress upon our British world of late years. These lessons are now being written in letters of flame on men's minds. The importance of coaling-stations, the need of instant communication with every part of the world, the overwhelming weight of naval defence energy, the amazing significance of sea-power, are things which are now in every man's thoughts. Are we British people going to learn, and learn effectively, one great lesson which they teach? Will the events of the past week at last make us realise the immediate necessity for constructing the Pacific cable? It seems to me that Canada is the country which should move in the matter, and move at once. I believe that the whole thing can be done, so to speak, with the turn of a finger. A joint resolution by both Houses of the Canadian Parliament, addressed to the Queen or to the Colonial Secretary, asking that a Royal Commission should at once be appointed, with full powers to arrange for the construction and operation of a cable from Canada to Australia, and to assign the fair proportion of cost to be borne by the different parts of the Empire, would almost compel action in the matter. Canada's guarantees for the initial cost tacked to the resolution would make it immediately effective. Such a guarantee can be given without any risk. Sir Sandford Fleming has proved over and over again that the cable must necessarily pay from the start. We do not contribute to the Imperial army or navy, which protects us, but we can at least show our national pluck and patriotism in a peaceful enterprise like this. The proposal is made in no jingo spirit. To quote the words used by the American Admiral to Mr. Goschen, as they together viewed last summer the thirty-mile line of British battleships drawn up at Spithead: "This makes for peace." The mere idea of the whole might of the British navy—its North Pacific squadron, its China squadron, its Australian squadron, its West African and East African squadrons, to say nothing of the Channel and Mediterranean fleets, or of the flying squadrons, which we now know can be sent to sea inside of forty-eight hours—launched from every quarter of the globe under the impulse of one will and one national purpose against an enemy, presents, in the light of recent events, a picture of prodigious and irresistible power, which, more than anything else, will make nations disposed to trouble us shrink from war. The comparative paralysis which would fall upon this gigantic machinery if the power of concerted action were removed, as it is likely to be without a Pacific cable, cannot be contemplated with equanimity by a nation which has such vast industrial and commercial interests at stake as have our British people. A single battleship let loose on one of our great cities in any corner of the world would in one hour do more damage than would cover the cost of three such cables. If we have men at Ottawa who know how "to take occasion by the hand," now is the opportunity. Not a moment should be lost, for we know how easily the destructive forces of the world may be let loose. British people hold a position in the world where they must do something more than hope for peace; they must, if possible, command it. This is a time when every link in the Empire should be firmly welded, and Canada has the opportunity of welding one of the most important. I am satisfied that the Government at Ottawa would be heartily supported by men of all parties if they boldly and immediately dealt with the question.—GEO. R. PARKIN.

I think that is a pretty good argument in favour of immediate action without requiring any further remarks from myself.

## No. 16.

From the Hon. the PREMIER, Brisbane, to the Hon. the PREMIER, Wellington.

(Telegram.)

Brisbane, 10th August, 1898.

PACIFIC cable. Queensland prepared join other colonies guaranteeing four-ninths of cost of construction.

## No. 17.

From the Hon. the PREMIER, Wellington, to the Hon. the PREMIER, Brisbane.

(Telegram.)

Wellington, 11th August, 1898.

CABLEGRAM tenth received. Select Committee here inquiring into Pacific-cable matter. Glad have Queensland with us. Hope communicate with you definitely few days.

## No. 18.

Sir SANDFORD FLEMING to the Hon. the PREMIER.

DEAR SIR,—

Ottawa, 5th July, 1898.

I addressed you by letter on the 23rd June. On the 29th June I deemed it expedient to send a telegram to Vancouver to be forwarded by the outgoing steamer of the 30th. The object of this telegram was to qualify my letter of the 23rd, which you will receive by the same steamer. In order to place myself right I feel it my duty to send the following explanations by the next following steamer :—

In the third paragraph from the end of my letter of the 23rd, I stated as follows: "While this apportionment of the liability (viz., Australian Colonies, three-ninths; New Zealand, one-ninth; Great Britain, three-ninths; and Canada, two-ninths) would give to New Zealand an equitable interest, and the Australian Colonies exactly what they agreed at the Melbourne Conference of Premiers to take, it would be less onerous to Canada, and, in my own judgment, more equitable all round. I speak advisedly when I say that I have reason to believe it would be perfectly acceptable to the Ottawa Government."

When I then wrote I felt quite justified in making the above statement. I had addressed Sir Richard Cartwright, who, as Minister of Trade and Commerce, has the subject of the Pacific cable in his hands, and it was on the strength of a note received from him on the 14th June that I addressed you in the terms of my letter of the 23rd June. I have not seen Sir Richard since: he has been and still is away from Ottawa; but I have heard through a mutual friend that he holds the view very strongly that Australia and New Zealand together should assume one-half the whole liability, and leave Great Britain and Canada to bear the other half as they may arrange. Having been so informed I feel it my duty to lose no time in making the correction.

This counter-division adds one-eighteenth to the proportion assigned to the Australasian Colonies, and if Great Britain bears one-third it will reduce Canada's liability by one-eighteenth: that is to say, it would be one-sixth in place of two-ninths. In my judgment it would make no practical difference to Canada whether she assumes one-sixth or two-ninths the liability. It would be a mere nominal liability, and would never cost the Canadian people a single shilling, provided always that the four chief Australasian Colonies embarked in the enterprise with the Dominion, and took a sufficient proprietary interest in it to guarantee that the traffic which they will control would be directed over the new line in sufficient volume to make the undertaking remunerative.

It has been demonstrated over and over again that the cable can be established as a State work without costing Canada, the Australasian Colonies, or the British taxpayer a single penny. If it had been possible to disprove that demonstration it would have been long since disproved by the agents of the Eastern Extension Company. They have, it is true, tried in many subtle ways to throw doubt on it, but the demonstration practically remains unchallenged. The business is so vast and its increase so steady that it will pay interest on capital, maintenance, renewal, sinking-fund, and working expenses, and leave a large margin. Moreover, as another result, the charges on messages would be reduced as profits increased until they reached a lower scale of rates than is now dreamed of. At the risk of repeating myself on this point I will add an extract from a recent letter which I addressed to a Canadian M.P. :—

The cost of the cable has been ascertained to be under £1,500,000, and the most careful experts have calculated that an annual gross income of £150,000 would more than meet interest, sinking fund, working expenses, and maintenance. In the year 1896 the cable traffic between Australasia and Europe, according to Government returns, reached 2,326,984 words. If we reckon the traffic at 3s. a word (the rate between Australia and Europe is 4s. 9d. per word), we have a gross revenue of £349,047, showing very clearly that, even assuming the cable business will never exceed that of 1896, there would be amply remunerative business for the Pacific cable.

But the cable business is progressive. The following is a statement taken from the Government returns of the number of words transmitted in each year from 1891 to 1896: the traffic for last year (1897) has not yet been received :—1891, 1,110,869 words; 1892, 1,321,412; 1893, 1,401,293; 1894, 1,323,243; 1895, 1,948,630; 1896, 2,326,984.

This establishes that from 1891 to 1896 the cable business has more than doubled, and, in view of the stimulating effect of a new line of communication, it is reasonable to estimate that the gross cable business in 1901 will not be less than 4,000,000 words. As 1,000,000 words at 3s. a word will produce £150,000, the revenue required to cover every charge against the Pacific cable, it is evident that if the Pacific cable obtains one-quarter of the Australian-European traffic it will be a paying concern from the first year it can be put in operation.

To my mind there is no reason to apprehend that the Pacific cable will not obtain far more than one quarter of the entire cable business. The Australian land lines are public property, managed by the Post Office Departments,

and each Government will have the power to direct traffic over the Pacific cable, so as to make it remunerative. The cable business takes its origin chiefly in New South Wales, Queensland, Victoria, and New Zealand, and it is obvious that if these colonies have a proprietary interest in the undertaking its complete financial success will be assured.

I have said that, for the reasons given, the difference of one-eighteenth, more or less, in the proportion of guarantee allotted to Canada would be of no practical moment. Equally it can be said that it would not be felt by the combined four Australasian Colonies. It could in truth be affirmed that it would make no difference to them, or any of them, whether their united guarantee be eight-eightieths or nine-eightieths of the whole cost. But Australia and New Zealand are much more interested in the establishment of the Pacific cable as an alternative line than Canada can possibly be.

It is obvious to me that the Minister of Trade and Commerce means business, and that he will advise his Government to join in carrying out the undertaking on condition that Canada guarantees only what he has fixed in his mind to be a fair share. The Southern Colonies can have the cable on these terms.

Yours, &c.,

SANDFORD FLEMING.

The Right Hon. R. J. Seddon, Premier of New Zealand.

### Enclosure in No. 18.

[Extract from the *Westminster*, 2nd July, 1898.]

THE BRITISH EMPIRE TO-DAY AND TO-MORROW.—CANADA THE HALF-WAY HOUSE OF THE EMPIRE.

By Principal G. M. GRANT, D.D., LL.D., Queen's University, Kingston.

WITHIN the last year or two Canadians in general have fully awakened to the perception of certain facts and ideas, which are of fundamental importance to them, alike as citizens and as Christians. That the British Empire is not a myth but a reality, a reality which it is the duty of all its members to make more effective; that Canada occupies a unique and most important position in that Empire, as its great half-way house, between Australasia on the one side and the United Kingdom on the other, and that it is our duty to rise to the demands of the position and of the time in which we live; that to-day, as during the two thousand years between Abraham and Jesus, God works out His purposes of love to mankind by a sovereign election of individuals and of nations, and that He has chosen the English-speaking race to contend all the world over for the sacred principles of civil righteousness, public order, liberty, and peace—these are the inspiring facts and ideas to which I refer. For these our fathers poured out their treasure and their blood as freely as water. We have entered into the glorious inheritance purchased by them. Is there nothing for us to do but to live at ease, to scoff at every mention of national sacrifice, and to preach the gospel of dirt, that as man is only an animal he does live by bread alone, and that he is a fool to think of anything but material prosperity? This miserable evangel is preached by men from whom other things might be expected, men who ought to know that our civilisation, with its high thoughts, aims, and inspirations, has come not from rich Sodom, or rich Egypt, or rich Nineveh or Babylon, but from poor, rocky Judea, and next to it from feeble Athens, and from the little city which Romulus and Remus founded on the banks of the Tiber. Let them preach, but let us “arise and build.” We have warnings and encouragement enough. For warning, the fate of Sodom; and “this was the sin of Sodom—pride, fullness of bread, and abundance of idleness in all her borders.” For encouragement, the rise of our Motherland from the comparatively weak Britain of Elizabeth and Knox, of Cromwell, Milton, and the Scottish Covenanters, into the world-wide Empire, whose flag stands everywhere for “the open door,” and for law, for liberty to the slave, and for universal peace, even though we have to fight for it, just as the twenty thousand well-drilled, highly-paid policemen of London are the army prepared to fight for the preservation of its laws, its liberties, and its peace.

How, then, shall we make Canada not only the geographical, but the political and commercial, half-way house of the Empire? We have duties as a colony or Dominion, as a nation, and as an Empire, for so unique is our position that we may be said to be actually or potentially all three. We must attend to parish politics, and it is needless to say that the hand-to-mouth politicians will not let these be neglected; but we must also attend to larger affairs, or we shall suffer from our faithlessness. Selfishness puts on airs as the practical guide of life, but it is blindness to all high and permanent interests. Let us pray that the members of our Government may not be blind; but, if we pray honestly, we shall also act; for as we are a free, self-governing people we cannot expect the Government to be far in advance of the popular will. We must press on the Government its duty. We must support it in efforts to promote the general well-being, though there should be nothing for us individually in these efforts. We must discuss intelligently every proposal that has for its object the knitting together of the Empire, to be an effective instrument for the formation of its best moral ideals. All this is our religious duty; for, as children of the Reformation, we must rise above the mediæval division of life into sacred and secular regions, and believe, with George Herbert; that

Who sweeps a room as for Thy cause  
Makes that and the action fine.

In the Imperial projects, in which we should take a hand, it is our duty to act as all engineers do in construction, “work along the lines of least resistance,” act—that is, where the maximum of benefit shall be obtained at the minimum of cost. We should also “do the duty which lies nearest us,” for, when that is done, we shall see more clearly than now what is the next step which we should take.

These thoughts have been suggested to me by reading a “return” which has just been published by the Secretary of State to an address of the House of Commons, dated the 18th April, 1898,



for a copy of the report of the Committee appointed by the Imperial Government in 1896 to consider the question of a telegraph cable between Canada and Australasia; also, of any reports or correspondence to the Canadian Government from the Canadian representatives on said Committee or Sir Sandford Fleming in regard to the same subject.

But what have we to do with a Pacific cable? the ordinary Canadian may ask. Very much, directly and indirectly. Think what an all-important part the telegraph plays in our ordinary life. How could we get along if there were no telegraph-line, especially when the House is sitting, between Ottawa and Toronto, or none between Toronto and Montreal? Yet, if a letter is posted in any one of these cities, we can get an answer from any other of them the very next day. But how is it with the three greatest divisions of the self-governing British Empire? If we write to Australia or New Zealand, months elapse before we can get an answer. If we telegraph, the message—instead of going directly down the Pacific—goes across the Atlantic and then almost round the world the other way, and at rates that are practically prohibitive. If an Australian telegraphs to us, the message has to be sent, in the same way, first to Britain and then across the Atlantic. In other words, instead of being the half-way house of the Empire, as God has made us, Canada is shunted and side-tracked away up a distant back street. Ought we to be quite content with such a situation?

And what if war should break out? Wars have been since the dawn of history, as they were in prehistoric times also; and wars shall be, for a few thousand years to come; although I believe in the coming of the day when wars shall cease to the ends of the earth, because all nations shall be so knit together by commerce, literature, and the knowledge of the Lord that the disturber or wanton breaker of peace shall be sternly arrested by irresistible forces on the side of order. Then, indeed, "the sword shall keep the sword in the scabbard;" but that glorious consummation shall not be in our day, no, nor in the days of our children. When war breaks out, what next? The Eastern Extension telegraph cables skirt hostile shores, and are at many points in such shallow waters that they can be cut without difficulty. At once, then, Great Britain, Australasia, and Canada are severed, and as completely isolated from each other as they were before the first submarine cable was laid. What a condition for an oceanic Empire to be in! Is it necessary to go into details of what this would mean? I think not. My readers may be credited with the possession of at least a minimum of imagination.

How different would the case be if a cable were laid between our Pacific coast and Australia, *via* Fanning Island and Fiji. The termini and intermediate points would be guarded, and grappling for a deep-sea cable is all but impossible as long as Britannia rules the waves. The unity of the Empire would be preserved even in war, and in peace Canada would be the real half-way house of the Empire, with important consequences to its welfare, which need not be enlarged upon at present.

Why should Canada take the initiative in this matter, when it is infinitely more demanded by the commercial necessities of Australia? I answer, in the words of Mr. Casey, in his speech in the House of Commons, Ottawa, on the 26th May: "In the first place, because she is the most important colony, and most interested in this cable of any except Australia. In the second place, because Canada has acquired already what it is now fashionable to call the hegemony of Greater Britain. She is the most important in the councils of the greater Empire which lies outside the British Islands. Since the day of the Jubilee celebration, I think that cannot be doubted. Ever since then it is admitted by Englishmen that Canada is not only the leader of the colonies, but the leader of the Empire, in many questions of policy, both internal and external. Canada has already gone a long way on certain paths which are intended to promote not only her own prosperity, but the unity of the Empire and the mutual co-operation of its different members. It is eminently proper, therefore, that Canada should take the initiative in this matter. I do not speak now as if the initiative remained to be taken. Canada has taken the initiative in discussing this matter and obtaining the necessary information with regard to it. What is required is that she should now take the initiative by being the first to lay down a definite scheme to carry out the plans that have already been fully discussed, and take up her share of Imperial responsibility in this connection."

Let me add to Mr. Casey's reasons one or two more. In the third place, because it is difficult for Australasia to act, as she is not a political unit, and her whole thought is occupied at present with the problem of her political unification. The British Government cannot be expected to take the initiative, because the share capital of the Eastern Extension Company is owned by people in Britain, including men of great influence in the ranks of the Government and the Opposition, as well as high officials in the departments, and the present value of these shares would be lessened by the laying of an alternative line. The interest earned might actually come down from 18 to 9 or 10 per cent., and men who fear such a contingency are sometimes blind to the public interest. No one wishes to injure legitimate commercial enterprises, but the Eastern Extension has had blood enough, and might well be content now with reasonable profits. In the fourth place, because, in taking the initiative in this matter, Canada would be acting as a partner in the Imperial concern "along the lines of least resistance." She would confer a boon of quite extraordinary magnitude on the Empire by a policy as wise as it is bold, because it could be carried to successful completion without costing the Canadian, the Australian, or the British taxpayer one dollar. So vast is the business, and so steady the annual increase between Australasia and Britain, without counting that between Australasia and North America, the whole of which would come by the new cable, that it has been demonstrated in the return to which I have referred that 40 per cent. of it would pay for interest on capital, maintenance, renewal, sinking fund, and working-expenses, and leave a large margin. That 40 per cent. Queensland, New South Wales, Victoria, and New Zealand could guarantee, because they own the land-telegraph lines, and control the traffic. Not only so, but another immediate result would be the lessening of cable rates, with the prospect of a steady scaling down, as profits increased, until we could cable between the great sections of the Empire for 1s. a word. What that would mean for binding them together in a close material and moral

union, in an age when Governments rest, not on external authority, but on intelligent opinion, it is needless to point out.

It may be asked why, if this enterprise is so sure to pay, it should not be undertaken by a private company. Simply because the Eastern Extension could easily kill a rival company, and the knowledge of that fact clears the field of all rivals. It has fought and is fighting unscrupulously against the proposed Pacific cable, because that would destroy its fat and oppressive monopoly. Its policy is opposed to the public interest, and therefore the public must no longer be tied to its chariot-wheels. As Sir Sandford Fleming says in the return ordered by Parliament :—

“In the interests of the Eastern Extension Company the Pacific cable has been declared to be impracticable; its cost has been greatly exaggerated; it has been denounced as a work which could not be maintained without burdensome subsidies; it has been stigmatized as inimical to telegraphy and trade; and it has been decried and misrepresented in every possible manner. The explanation is to be found in the fact that the company is unwilling to relinquish its monopoly, and to rest satisfied in the future with a reasonable return for capital invested. On this point the writer is tempted to quote a single paragraph from his address at the Colonial Conference of 1894 as given in the proceedings (page 85) :—

“The progress and well-being of Canada, Australasia, and the Empire cannot be retarded in order that the lucrative business of a private company may remain without change. Even if the Chairman of the Eastern Extension Company succeeded in converting us to his commercial ethics, that the profits of the monopoly he represents must be maintained inviolate, it does not follow that the project of a Pacific cable would not be carried out in some form, even if Canada and Australasia abandon it. There are indeed unmistakable signs that a Pacific cable may shortly be carried out by France and the United States. We all know that France has already completed a section of 800 miles at the southern end, and the United States has recently expended 25,000 dollars in making an elaborate survey of about one-third the whole distance from San Francisco to the Hawaiian Islands. With a rival line in foreign hands, it is easy to see that the Eastern Extension would gain nothing, while the Empire would lose much.’

“With respect to the objections raised by the Eastern Extension Company, they have been completely refuted. The very best evidence shows beyond all question that the project is perfectly feasible; that the cable should be established as a State work; that, so established, the revenue from business obtainable will be ample to meet every charge, including working-expenses, maintenance, renewal, interest on cost, and sinking fund to replace capital; that, in fact, the cable can be established in the most satisfactory manner, and that all its advantages can be attained without any cost whatever to the taxpayer. That the prospects are of this character is attributable to these facts, viz. :—

“1. As a State work, the capital employed would be obtained at the lowest possible rate of interest.

“2. The capital would be limited to the necessities of actual expenditure in establishing the work. There would be no possibility of enlarging the capital account by adding ‘promotion expenses’ or by ‘watering stock’ in any form.

“3. No dividend would require to be declared, or bonus paid. Revenue would only have to meet ordinary charges, including interest on the actual cost at a low rate, possibly  $2\frac{1}{2}$  per cent.

“4. Remunerative traffic, which would be controlled by the Australasian Governments, already exists.

“5. Such traffic is continually growing, and it is difficult to assign a limit to its growth.

“6. The facilities created and the reduced charges would open up a new and profitable business across the Pacific which would be subject to the new line.”

Here, then, is a matter of Imperial and Canadian concern, to which the Government of Canada should give immediate attention. It is bound in honour to act, for it has again and again pressed it on the attention of its partners in the Empire, and unless it makes a practical proposal the matter will drop between three stools. Queensland, New South Wales, Victoria, and Tasmania have recently undertaken to guarantee three-ninths of the cost. New Zealand will probably be good for one-ninth additional. Let Canada offer to guarantee two-ninths, on condition of Britain doing the rest, or of making some equivalent proposal, and the hand of the Imperial Government—or, rather, the heavy wheels of its State coach—would be forced to move. Once set in motion there is no doubt as to the result, and to Canada the credit would again accrue of being awake to the signs of the times, while its position as the half-way house of the Empire would be established for ever.

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