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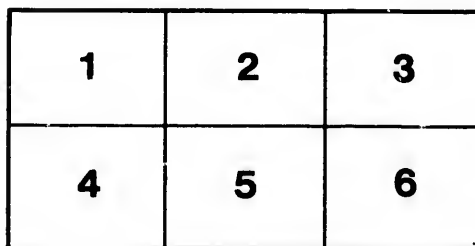
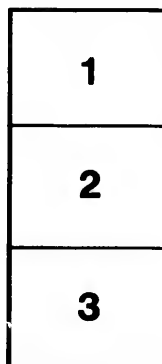
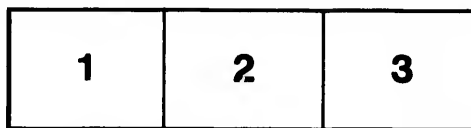
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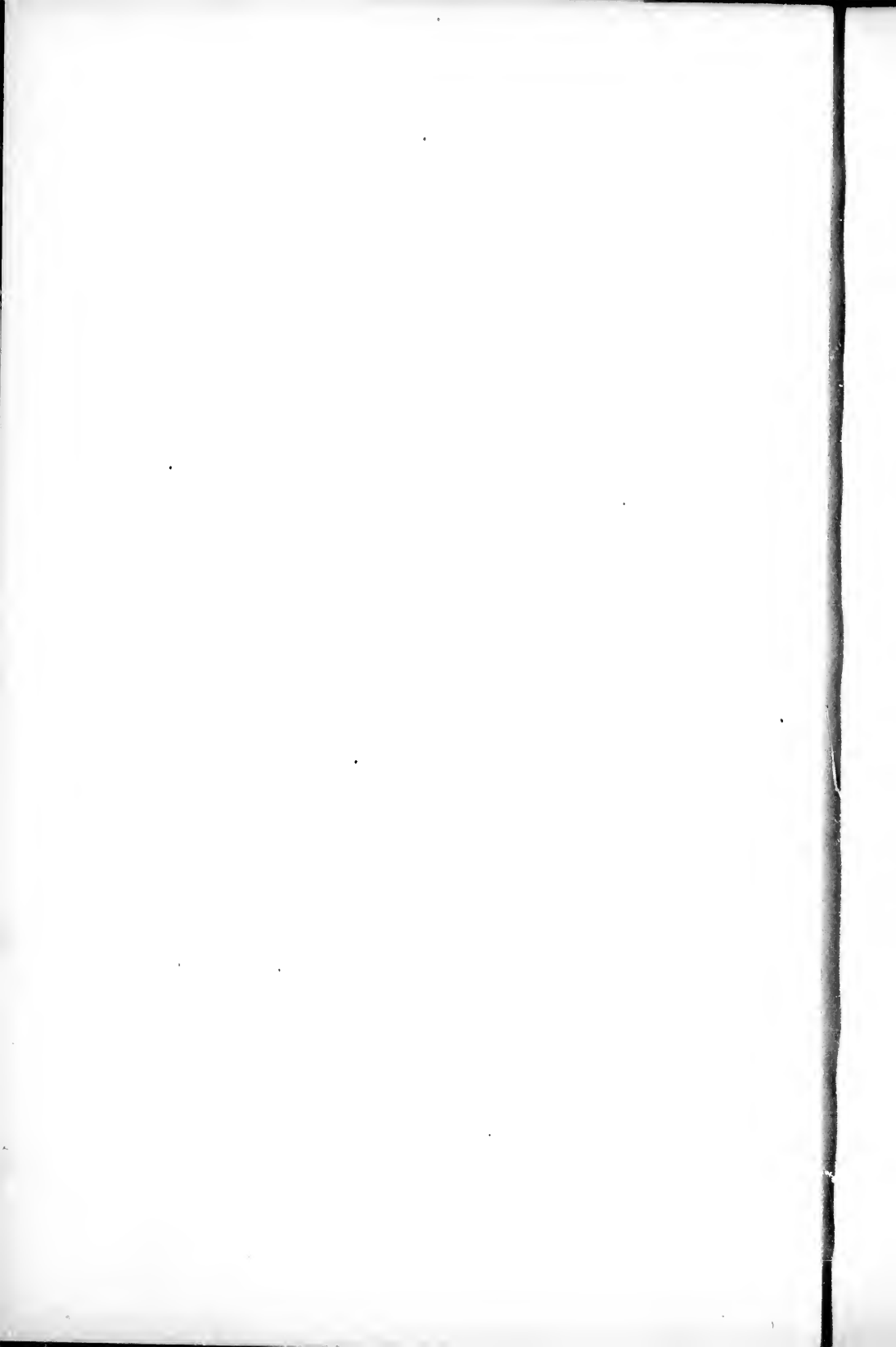
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LETTER  
TO HIS EXCELLENCY  
THE RIGHT HON. THE EARL OF HOPETOUN  
GOVERNOR GENERAL OF THE COMMONWEALTH OF AUSTRALIA  
ON A COMPLETE SYSTEM OF  
STATE-OWNED CABLES AND TELEGRAPHS  
WITHIN THE BRITISH EMPIRE

BY

SIR SANDFORD FLEMING

TO WHICH IS APPENDED A LETTER ON THE SAME BY THE SAME

ADDRESSED TO

THE RT. HON. JOSEPH CHAMBERLAIN

Secretary of State for the Colonies



# STATE-OWNED TELEGRAPHS FOR THE EMPIRE.

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OTTAWA, December 3, 1900.

To His Excellency

The Right Honourable THE EARL OF HOPETOUN,

Governor General,

Commonwealth of Australia.

MY LORD,—I had the honour, in October, 1898, to address the Right Honourable Joseph Chamberlain, Secretary of State for the Colonies, on the subject of a state-owned system of cables for the British Empire. My letter was made public and the records of the press show that much interest was awakened and that a singular unanimity of opinion was evinced in favour of the proposal. Since that date events have occurred, which while they have had the effect of diverting attention from the subject, have at the same time in a remarkable degree emphasized its importance, especially to Australasia. I venture to think, therefore, that no time could be more opportune for its consideration than on the occurrence of the inauguration of the Commonwealth of Australia.

In asking Your Excellency to be good enough to bring the remarks which follow before the Government of the Commonwealth, I am unable to claim that I hold any official position. It is merely as a Canadian subject of Her Majesty that I make the request, and, as such, I feel we in Canada desire to think that we enjoy privileges, and have interests and rights, in common with our fellow-subjects in Australia. While I venture to speak for my countrymen on the subject of this communication, and there are substantial reasons why I should do so, it is not without hesitation that I assume the self-imposed duty; but all hesitation must be set aside in view of the words of Your Excellency in bidding farewell a few weeks back at Hopetoun House in Scotland: 'This is no time for any one to hang back when he can serve the Empire. Some can serve as soldiers, and right well have many done so during the past twelve months, others can serve in other capacities.'

I appeal then to Your Excellency in this spirit, satisfied that there are none so humble who cannot do faithful service. I appeal to Your Excellency under the firm conviction which has been forced on me that the subject of this communication demands immediate and earnest attention. I venture strenuously and respectfully to urge that it be one of the first matters brought to the consideration of your Government.

In Canada not less than in Australia we have an abiding desire to serve the Empire. Soon after Canadians embarked in the constitutional career in which the Australian people are about to enter, they undertook a work of Imperial magnitude—the establishment of a Telegraph and Railway across the continent of North America. Long before the undertaking was completed it became apparent that the electric wire on reaching the Pacific from the East should be extended across the Western Ocean. The first proposal to connect Canada with Australia by a trans-Pacific electric cable was published in returns relating to the Canadian Pacific Railway laid before Parliament in 1880. From that date until the present the Canadian Parliamentary records give evidence that the project has always been kept prominently in view.

It has fallen to my lot during these twenty years, unceasingly to take more or less active interest in the telegraphic connection of Australia with the mother country by way of Canada. The evidence shows that it has been a long chapter of difficulties and disappointments, that a series of obstructions raised by strong opposing influences have been encountered, but that owing to unrelaxed, persistent efforts and the steady adhesion of friends of the enterprise they have one by one been overcome. The dominant reason for desiring to see every obstacle removed and the connection by telegraph effected by the Canadian route is explained by the vitally important fact, that the Canadian route is absolutely the only route by which the globe may be girdled by a series of all-British cables. Prolonged delays have been caused, but at length success is assured. An arrangement has now been reached under which the several governments immediately concerned shall without further loss of time, establish the Pacific cable as a State undertaking. The first part of the problem may therefore be regarded as solved, and the way is opened for entering fully into the consideration of the main proposal, viz. : The establishment of a complete system of inter-Imperial cables, which will put each part of the realm of Her Majesty in touch with every other part ; the whole under state control, so that it can be utilized for the highest good of the Empire.

At the close of the nineteenth century it is impossible to form a narrow conception of the British Empire. It has long since ceased to be confined to the group of islands on the west coast of Europe. The Empire has undergone an extraordinary expansion, and now embraces vast territories in the four quarters of the globe. The subjects of the Queen are in possession of an immense extent of the earth's surface. The European home of the British people occupies but a fraction over one per cent of the superficial area of the whole Empire.

The great Ruler of the Kingdoms of the world has brought many lands under one sovereignty. He has granted to our Queen length of days, and placed Her Majesty over great multitudes of the human race, comprising various nations and kindreds and peoples and tongues. We may regard this as evidence of beneficent design, and we are called upon as human agencies to take every means at our disposal to perfect the union

of the mother of nations with the daughter states, in order that, united, they may fulfil their higher destiny.

The countries occupied by the family of British nations are widely sundered geographically ; their shores are washed by the great oceans, and although for purposes of commerce, inter-communication is effected by fleets of steamships and sailing vessels, more adequate means of intercourse is needed. For general security, for great state purposes, no less than for the operations of trade and for ordinary social requirements, all the different parts of this widely scattered empire demand the freest use of the most perfect means of communication known to us.

We are familiar with the electric telegraph and its employment by land and sea. This marvellous agency is at our command, and it only requires to be properly applied, in order that it may best serve the highest interests of the people of the empire. Already it is employed in part, but as at present established and administered it is open to grave objections. It is wanting in essentials to our daily needs, and we are debarred from enjoying all the advantages which, if properly applied, it can confer.

There are lines of telegraph established across parts of Europe, Africa and Asia, connecting Australia with the mother country, but these lines at certain points pass through foreign territories or touch at foreign ports. At many places on their way they traverse shallow seas in proximity to foreign states, where they are liable at a critical moment to speedy interruption. Moreover, these telegraph lines are owned and controlled by private companies, and charges are exacted for the transmission of messages which are felt by all to be exorbitant, and by most people absolutely prohibitory.

In my letter to Mr. Chamberlain of October 28, 1898, a revised copy of which is appended, I have set forth the outlines of a scheme of arrangement for cables and land telegraphs by which the most wonderful product of science of the age may be adapted to the peculiar conditions of our empire. The proposal is to establish electric cables, to and from each British possession ; these cables to be connected with the local land lines in Canada, Australia, South Africa, India and elsewhere ; in this manner linking together the whole empire by a chain of telegraphs without touching the territory of other nations, at the same time avoiding shallow waters adjacent thereto. Moreover, it is designed that the whole system of telegraphs, by land as well as by sea, be brought under state control, in order that the fullest benefit to the British people everywhere, and to the empire, be attained.

In my letter to Mr. Chamberlain, a peculiarity of the electric telegraph of far-reaching importance is pointed out. It is a peculiarity which, however, cannot be turned to public advantage so long as the cables of the empire remain in the hands of private companies. The cost of sending a message by telegraph is not, as is gen-

erally supposed, governed by distance. It is true that the companies charge according to distance ; but this is simply an expedient for obtaining from the telegraphing public larger profits. As a matter of fact, there is practically no more current outlay incurred in transmitting long than in transmitting short distance messages. It may be contrary to practice it may not agree with preconceived ideas, but it is a fact nevertheless, that there is no known means by which communications may be sent at less actual cost than by telegraph. A mail or a letter cannot be conveyed by railway or ocean steamer without expenditure on coal, machinery, oil, wages, and other things, to keep the train or ship in motion. The expenditure is constant for every hour, and continuous for every mile. The circumstances are entirely different in the case of the telegraph ; when once established, equipped with instruments and manned by operators, messages may be transmitted one hundred or one thousand miles, with as much ease and at no greater actual cost than one mile.

This remarkable anomaly added to the equally remarkable, although better known fact, that transmissions by the electric wire are instantaneous, point to a system of State-owned cables and telegraphs as the ideal means of communication for an empire under such conditions as ours. If it be the case, and it is indisputable, that long-distance messages can be sent at no more actual working outlay than short-distance messages, we have happily a means at our command which will greatly tend to unify and consolidate this widely-scattered empire, provided we have the wisdom and forethought to bring it into use. If the principle of state-ownership of cables generally be carried into effect as suggested, I do not hesitate to state my belief that the day is not far removed when oversea messages will be sent from any one British possession to any other, whatever the distance, at the uniform charge, first of one shilling, and eventually of six-pence a word.

I have always held the Pacific cable to be the initial link in a great chain of globe-encircling Imperial telegraphs. The mere advocacy of the Pacific cable has already benefited Australia by lowering charges levied on messages fully fifty per cent, and any accountant can estimate the enormous money value of this benefit by the saving which has accrued during the past ten years. I do not doubt that the advocacy of the Imperial system will have a similar effect on the policy of the companies in still further reducing charges, but any such reduction will be incomparably less important than the advantages to result from placing the cables and telegraphs of the empire under state control. At present it is recognized that the empire is inadequately provided with the means of telegraphic communication, that commerce is unduly taxed in consequence, and that an embargo is placed on the free intercourse of the British people. The circumstances of to-day demand multiplied facilities for sending telegrams from any one part to any other part of the empire at greatly reduced charges, in order to widen the use of telegraphy to all classes of the community. With an

Imperial chain of cables established, incalculable advantages would follow, and Her Majesty's subjects, in whatever part of the world they may be situated, could interchange communications with the greatest possible ease and the greatest possible economy.

Some words may with propriety be added with respect to the position of Canada in the matter. It will be borne in mind that it is owing to the unparalleled expansion of the Empire and the resultant circumstances that some organization is absolutely needed to secure unfettered intercourse, and that in this respect the subject concerns Canada in common with Australia and all other parts of Her Majesty's wide domain. There is abundant evidence to show that in Canada we have common interests, common sentiments, common aspirations and common sympathies with our kindred in Australia. Have we not during the past year sent our bravest to fight a common foe? and have not our sons fallen on the same field and been laid in a common grave? Before these lines reach Australia the world will have revolved into another year. At this date we in Canada appear to be standing in the old century gazing across the deep into the dawn of the new. We are distant spectators, yet intensely interested in the starting of the constitutional machinery of a sister nation to dominate for all time in another quarter of the globe. We recognize and welcome the approaching great historical occasion as an epoch to denote the steady evolution of an unique Empire of many commonwealths.

It will be apparent from the preceding remarks that a complete system of State-owned telegraphs encircling the globe would in no small degree contribute to the consolidation of the great Oceanic Empire. It will further be obvious that owing to the position of Australia in the southern seas and her comparative isolation from other parts of the world, still more by reason of the highly important place she is destined to fill among the nations, that it would be fitting to signalize the birth of the new commonwealth by initiating a comprehensive system of cheap and speedy communications of permanent advantage to the whole British people.

Naturally it is felt that the initiative must be taken by Australia. I trust, therefore, that Your Excellency's government will see the way clear to take such action as may be expedient.

I have the honour to be,

My Lord,

Your obedient servant,

SANDFORD FLEMING.

*(Letter to the Right Honourable Joseph Chamberlain on the subject of a State-owned System of Electric Cables for the Empire. By Sir Sandford Fleming.)*

OTTAWA, October 28, 1898.

The Right Honourable  
JOSEPH CHAMBERLAIN,  
Secretary of State for the Colonies.

SIR,—I had the honour, on 28th December of last year, to address Sir Wilfrid Laurier respecting the proposal to establish a state-owned Pacific cable. Circumstances have since arisen which impel me to ask permission to address you on the subject of a state-owned system of cables for the British Empire.

In the remarks which follow, the subject will be discussed on its merits. I venture to think that the arguments advanced will make it clear that such a service is extremely desirable and is fast becoming a necessity. The telegraph is an essential ally of commerce and is indispensable to the full and satisfactory development of trade and shipping. The trans-Pacific steamship lines which have been established are heavily handicapped by the absence of any direct means of telegraphy between the ports with which trade is carried on. The Pacific cable would serve the purposes of trade between Australasia and Canada, but these countries are debarred from establishing independent telegraphic connection with Hong Kong, the terminal port of one of the steamship lines. Under an agreement, dated 28th October, 1893, the Eastern Extension Telegraph Company strengthened its monopoly by having Canada and the Australasian colonies telegraphically excluded from Hong Kong and forbidden to lay, or assist in laying, any new cable to that port for a period which does not expire until twenty years from the present date.

There remains only one way of gaining telegraphic connection with Hong Kong freed from exacting charges, and that is through the Home government. In granting to the Eastern Extension Company exclusive privileges, Lord Ripon, then Colonial Secretary, reserved to Her Majesty's government the option to take possession of the cable between Singapore, Labuan and Hong Kong, by giving twelve months' notice and paying the company £300,000.

My letter of December last to Sir Wilfrid Laurier (copy inclosed) sets forth the position and the attitude, to Canada and the Australasian colonies, of the Eastern Extension Telegraph Company. The proposal now submitted would undoubtedly interfere with the rich monopoly which that company enjoys, and to some extent, and for some time diminish its profits; but I venture to hold that no private company, however rich and influential, should be allowed to stand in the way when great Im-

perial interests are at stake. It must be borne in mind, too, that telegraphy is one of the most astonishing results of science, and that the facilities which it offers, if not shackled by hinderances, may be rendered of greater and greater value to the human race.

The advantages of cable connections and low charges increase with distance in an accelerated ratio. It is impossible, therefore, to set a limit to the commercial, social and political benefits which would result to the Empire from a state-controlled cable service reaching every British possession. In the following remarks I point out that the Pacific cable, established as now proposed, will prove to be the key to such a service, and practically its forerunner.

### BRITISH EMPIRE CABLE SERVICE.

The action recently taken in London in adopting the principle of cheap Imperial postage suggests that the time has arrived when the expediency of establishing a complete telegraph cable system throughout the Empire may be considered on its merits. The advantages which will inevitably follow the adoption of universal penny postage appear to be generally recognized, and I venture to think the public mind will be prepared to entertain favourably another proposal not less important. It is not necessary in the least to undervalue cheap postage or detract from its immense importance in order to show that a cheap telegraph service on a comprehensive scale is easily attainable, and that it would prove an effective means of speedy communication for an Empire such as ours.

The transmission of letters has always been a function of the government; indeed, it has been wisely held throughout the civilized world that the postal service should be controlled by the State. The electric telegraph is a comparatively modern introduction. In the mother country private companies were the first to establish lines of telegraph, but in 1868 it was found to be in the public interest to have them taken over by the State and placed under the Post Office Department.

A Committee of Inquiry had reported to Parliament: 'That the telegraph service as managed by companies, (1) maintained excessive charges, (2) occasioned frequent and vexatious delays in the transmission of messages, and inaccuracies in sending them, (3) left a large number of important towns and districts wholly unprovided for, and (4) placed special difficulties in the way of that newspaper press which had in the interest of the public a claim, so just and so obvious, to special facilities.' The transfer was effected in 1870. Changes and improvements were immediately made; the telegraph service, previously confined to lines connecting great cities where business was lucrative, was extended to many towns and districts previously neglected, and, notwithstanding the fact that the charges on messages were greatly reduced, the business developed to such an extent that the receipts progressively increased. Before the transfer it cost about six shillings to send an ordinary message from London to Scotland or Ireland. The rate was reduced to a shilling, and subsequently to six pence (the rate at present charged), and for that sum a telegram can be sent from any one station to any other station within the limits of the United Kingdom, without regard to distance.

It was early discovered by every country in Europe that so efficient a servant to trade and commerce, so important an aid to the State itself, should become a national institution. France, Austria, Prussia, Russia, Sardinia, Italy, Spain, Portugal and Belgium each established a State telegraph system, and, as in Great Britain, experience has shown that they have done this, not only with advantage to the various administrative necessities, but with benefit to the public at large.

Such being the unanimous conclusion, is not the application of the principle of State ownership on a larger scale than hitherto attempted a fit subject for inquiry? Is it not desirable and expedient that the whole British Empire should have a State-controlled cable system?

The conditions of the Empire are totally different to what they were some years back. When Her Majesty ascended the throne there was not a single mile of electric telegraph anywhere. There was not an iron ship of any class afloat, and mail steamships were practically unknown. From that period the conditions have been continually changing and the process of growth and development still goes on. True, change has met with resistance from individuals and companies and classes, but resist it who may, the law of development follows its steady course and continually makes demands on science and skill to meet the ever-changing conditions. We are living in an age of transformation; the spirit of discovery and enterprise, of invention and achievement, has extended and expanded the British Empire from the small islands on the coast of Europe to new territories, continental in extent, in both hemispheres. The development of the mercantile marine has carried the flag of our country over every mile of sea to meridians far distant from the motherland. In these distant territories, communities have established themselves under the protection of that flag. They have drawn riches from the forest, the soil and the mine. They have caused noble cities to spring up, rivalling in the splendour of their streets and buildings the finest cities of the Old World. These young nations, full of hope and vigour, have made progress in every direction; they are imbued with lofty aspirations, and their most ardent desire is to give their energy and strength to the building up of a greater British Empire, on the firm foundation of common interest and common sentiment.

At an earlier period of the world's history it would have been difficult to conceive the possibility of any lasting political union between countries so widely separated by intervening seas. The problem is, however, being solved, not by old methods, but by the application of wise principles of government, aided in a wonderful way by the highest resources of modern science. Steam has made the separating oceans no longer barriers, but the general medium of union. Electricity has furnished the means by which the British people in all parts of the globe may exchange thought as freely as those within speaking distance. These twin agencies of civilization are pregnant with stupendous possibilities. Already the one, as the prime factor in sea-carriage, has rendered universal penny postage possible. The other has made it equally possible to bring the British people, so widely sundered geographically, within the same neighbourhood telegraphically.

Imperial penny postage will have far-reaching consequences; it is undoubtedly a great onward movement in the career of civilization, and in the development of wider national sympathy and sentiment. But great as are the benefits to follow the adoption

of universal cheap postage, the first result, and not the least, will be to make plain that a postal service, however cheap and comprehensive, is in itself insufficient for the increasing daily needs of the now widely-distributed British peoples. It will be seen that in addition to an ocean penny postal service, the circumstances of our world-wide empire demand a cheap ocean cable service, extending to every possession of Her Majesty.

The carriage of letters at any known speed consumes time, and the length of time consumed depends on the distance traversed. The telegraph, on the other hand, practically annihilates space, and in this one respect has immeasurably the advantage over the ordinary postal service, especially in the case of correspondents who are separated by the greatest distances.

We can as yet but faintly appreciate the extent to which the telegraph may be employed, because its use heretofore has been restricted, on long-distance messages, by almost prohibitory charges. If messages be exchanged between places not far apart, let us say between London and Edinburgh, or Toronto and Montreal, the gain in time by the use of the telegraph is inconsiderable. But if the points of connection be far separated, such as London and Melbourne, or Ottawa and Capetown, the comparison between a postal and a telegraph service brings out the distinct value of the latter. In either of the cases last mentioned, while it would require the lapse of eight or ten weeks to obtain an answer to a letter by post; if the telegraph be employed, a reply may be returned next day, or even the same day.

Existing long-distance cables are little used by the general public; it may be said, not at all except in emergencies. They are used in connection with commerce, the growing needs of which demand more and more the employment of the telegraph, but owing to the high charges exacted its use is limited to business which would suffer by delay. These cables are in the hands of private companies striving chiefly to earn large dividends, and who adopt the policy of charging high rates, in consequence of which trade and commerce is unduly taxed, and its free development retarded. Were the cables owned by the State, large profits would not be the main object, and precisely as in the case of the land lines of the United Kingdom, it would be possible to reduce charges so as to remove restrictions on trade, and bring the telegraph service within reach of many now debarred from using it.

When the government assumed control of the inland telegraphs of the United Kingdom it was found possible greatly to reduce charges. In 1869, the year before the transfer, less than seven million messages were carried. At the transfer the rate was reduced to one shilling per message; the traffic immediately increased nearly 50 per cent, and continued increasing until, in the tenth year, twenty-nine million messages were transmitted, with a surplus of revenue over expenditure of £354,060. In another decade the total annual business equalled ninety-four millions, the operations still resulting in a surplus of £251,806 although the charge for a message had been meanwhile reduced from one shilling to six pence. It is indisputable that high charges restrict the utility of sea cables as well as of land lines, while low charges have the opposite effect. A few years ago the tariff of charges between Australia and London was nine shillings and four pence per word. The proposal to establish the Pacific cable and the discussion which followed, led to the cheapening of the rate to four shillings

and nine pence per word. In 1890, the year before the rates were lowered, the gross business consisted of 827,278 words. Last year (1897) it had increased to 2,349,901 words. In 1890, with high charges, the revenue was £331,468. In 1897, with reduced charges, the revenue was £567,852, or £236,384 in excess of 1890, when the highest rates were exacted.

The utility of the telegraph may be measured by the time gained over the post, and the success of the telegraph service of the United Kingdom must be accepted as convincing evidence of its utility and value, for the gain in time is, in this case, measured by hours only. Its striking success in this instance may be largely owing to State control, but whatever the cause, it is obvious that if, under similar conditions, weeks were gained instead of hours, the utility of the telegraph would be proportionately increased and its value as a means of communication correspondingly enhanced. There is another immense advantage, not generally known to the public, which can be claimed for telegraphy : It is the fact, that within certain limitations the actual cost of transmission is but little affected by distance. While the cost of carrying letters is in proportion to the distance traversed, the same rule does not apply to the electric wire. With a properly equipped telegraph system, the actual expenditure incurred in transmitting a message thousands of miles is practically no greater than in sending it ten miles. Obviously, therefore, the principle of 'penny postage,' that is to say, a low uniform charge for all distances, is applicable even more fully to ocean telegraphy than to the Imperial postal service. With these considerations before us, a moment's reflection leads to the conviction that this wonderful agency—the electric wire—places within our reach, if we have the wisdom to accept it, an ideal means of communication for the world-wide British Empire.

Thirty years ago the British Parliament for reasons, the soundness of which experience has fully confirmed, determined that the State should assume control of the inland telegraph system of the United Kingdom. To-day there are incomparably stronger reasons for State control being exercised over a cable system for the whole Empire.

The proposal is not altogether new. If the proceedings of the Colonial Conference of 1887 be referred to, it will be found that an Imperial telegraph service was foreshadowed in the discussions. To these I would refer, and especially pages 225 to 228, 339 to 341, and 513 to 520. In these discussions the delegates from the Cape of Good Hope, Natal, Australia, New Zealand, Newfoundland and Canada took part. Again, at the Colonial Conference of 1894 the proposal was set forth in some detail, and the advantages of an all-British system of telegraphy around the globe pointed out. On that point I beg leave to direct attention to the proceedings of the Ottawa Conference, and more particularly to pages 88 to 90, inclusive. Likewise to the proceedings of the second Congress of the Chambers of Commerce of the Empire, and more especially to a letter from the Ottawa delegate (July 1, 1892) to the President, Sir John Lubbock.

The proposal to complete the telegraphic circuit of the globe has no doubt suggested itself to many persons. Among those who have written on the subject may be mentioned, Sir Julius Vogel, at one time Postmaster General of New Zealand ; the late Mr. F. N. Gisborne, Superintendent of Telegraphs for the Canadian government ; Sir George Baden-Powell, M.P., London ; Mr. J. C. Lockley, of Nhill, Australia ; and

the veteran postal reformer, Mr. Henniker Heaton. At the Cape, Mr. Jan Hendrich Hofmeyer has given the matter his strongest support.

#### PROJECTED CABLE SYSTEM.

It may be laid down as an essential condition of an Imperial cable service, that none of the lines should touch foreign soil, and that they should be placed so as to avoid shallow seas, more especially those seas in proximity to any country likely at any time to prove unfriendly. In describing generally the route which would best comply with these conditions, I shall commence at Vancouver, for the reason that up to this point telegraphic connection with the Imperial centre in London is already assured, without being dependent on any foreign power. First, we have directed telegraphic connection across the Atlantic by a number of cables, and it is a mere question of cost to lay additional trans-Atlantic cables to be state-controlled, whenever they are wanted. Secondly, we have a transeontinental telegraph from the Atlantic coast to Vancouver, extending along the line of the Canadian Pacific Railway, and all practical telegraphers will recognize the great advantage of this position. By having the wires hung within sight of passing trains, the telegraph can be frequently inspected with the greatest possible ease, and faults when they occur, can speedily be repaired.

Commencing at Vancouver the cable would cross the Pacific to New Zealand and Australia, from Australia the main line would cross the Indian Ocean to South Africa, from South Africa it would traverse the Atlantic to Canada, where it would connect with the trans-Atlantic lines. Such a system of cables would complete the telegraphic circuit of the globe, and would constitute a base for connecting every one of Her Majesty's possessions and naval coaling stations (Gibraltar and Malta excepted) by the most perfect means of conveying intelligence at our disposal. Moreover, the connection would be formed by a system of all-British deep-sea cables in the position where they would be least vulnerable. This Imperial cable system may be considered in three divisions.

#### *(1.) Cables in the Pacific Ocean.*

The cable from Vancouver would first find a mid-ocean station at Fanning Island, second at Fiji Islands, third at Norfolk Island ; at Norfolk Island it would bifurcate, one branch extending to New Zealand, the other to the eastern coast of Australia.

There are many islands in the Pacific, some under British, others under foreign flags ; in course of time these islands could be served by branches as circumstances may require. The land lines of Australia would complete telegraphic connection with the western coast, or it may be deemed expedient to substitute a cable for the land lines over that portion of the interior between Adelaide and King George's Sound.

#### *(2.) Cables in the Indian Ocean.*

From King George's Sound, or other point in Western Australia, the cable would extend to Cocos Island, thence to Mauritius, and thence to Natal or Capetown, as may be found expedient. Cocos would become an important telegraphic centre ; it would

be a convenient point for connecting Singapore by a branch cable. Singapore is already in connection with Hong Kong by an all-British cable via Labuan, and Her Majesty's government can take possession by giving 12 months' notice. India could be reached by a branch from Cocos to Colombo or Trincomalee in Ceylon. At Mauritius a connection would be formed with the existing cable to Seychelles, Aden and Bombay.

### (3.) *Cables in the Atlantic Ocean.*

In order to avoid the shallow seas along the west coast of Africa, Spain, Portugal and France, it is proposed that the cable should extend from Capetown to Bermuda, touching at St. Helena, Ascension and Barbados as mid-ocean stations. At Bermuda a connection would be formed with the existing cable to Halifax, and at that point with the Canadian and trans-Atlantic lines, or a cable could be laid from Bermuda direct to England.

Much prominence has been given to a proposal to connect England with the Cape by a line of cable touching at Gibraltar, Sierra Leone or Bathurst, Ascension and St. Helena. I pointed out in my letter of last December to Sir Wilfrid Laurier, that there are grave objections to the northern half of that route, as "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 route now proposed from Ascension to Great Britain is certainly less direct, but the cables would be much less in jeopardy, and to this may be added, the advantage which would result in bringing the West Indian possessions within the Imperial telegraphic circle.

In order that some estimate may be formed of the cost of such an undertaking, I submit the following approximate distances which each group of cables would require to cover :—

- (1.) In the Pacific Ocean, from Vancouver to Australia and  
New Zealand ..... 7,150 knots.
- (2.) In the Indian Ocean, from Western Australia to South

#### Africa—

Maine line .....	6,500
Branch to Singapore .....	1,100
"    Colombo .....	1,500
	———— 9,100 knots.
(3.) In the Atlantic Ocean, from South Africa to Bermuda..	6,600   "
	————
	22,850   "

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The total distance for which new cables would be required (of which 20,250 knots would be in the main line, and 2,600 knots in branches) may be roughly placed at 23,000 knots, and the cost (including the branch to Hong Kong) between £5,000,000 and £8,000,000 sterling.

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I have long advocated the first division of the proposal,—the establishment of a cable from Canada to Australasia as a state work. I have felt that it would be the forerunner of an all-British telegraph system embracing the whole empire. As a state undertaking I am satisfied that the Pacific cable would be a complete commercial success, and that so soon as it so proved, the cable extension to South Africa and India would follow.

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One advantage peculiar to a globe-encircling system of cables will be apparent, each point touched would be in connection with every other point by two routes extending in opposite directions. This feature is of special value, as it practically constitutes a double connection in each case. The projected system of all-British cables with its branches would thus doubly connect the following fortified and garrisoned coaling stations, namely :—Hong Kong, Singapore, Trincomalee, Colombo, Aden, Capetown, Simons Bay, St. Helena, Ascension, St. Lucia, Jamaica, Bermuda, Halifax, Esquimalt, King George's Sound and Thursday Island. The following "defended ports" would likewise be connected, viz. :—Durban, Karachi, Bombay, Madras, Calcutta, Rangoon, Adelaide, Melbourne, Hobart, Sydney, Newcastle, Brisbane, Townsville, Auckland, Wellington, Lyttletown and Dunedin.

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Would it not be in the interest of a great commercial people to have these and all such points in the outer Empire connected by a means of communication so perfect as the electric telegraph? Is it not a matter which vitally concerns every British community around the globe? Is it not in their common interest that they all should be placed in possession of the speediest means of conveying intelligence the one to the other, free from the burden of high charges?

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That a State owned Pacific cable is the key to the situation, I am firmly convinced. Exhaustive examinations have proved its entire practicability. Its financial aspect has been minutely investigated by business men of the highest rank. The Canadian government appointed Lord Strathcona and the Honourable A. G. Jones for the purpose, than whom there are no men with stronger business insight. Their report is in the possession of the government, and it takes the most favourable view of the project. As a State undertaking it would be self-supporting from the first year of its establishment, and would admit of charges being lowered year by year. That the final outcome of the laying of this cable would be an Imperial telegraph service there can be little doubt. I am satisfied that the Pacific cable would prove to be the entering wedge to remove for ever all monopoly in ocean telegraphy, and free the public from excessive charges; that it would be the initial link in a chain of State cables encircling the globe, with branches ramifying wherever the British Empire extends, and that it would be the means of bringing into momentary electric touch every possession of Her Majesty.

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In 1837, Rowland Hill, in advocating uniform penny postage for the United Kingdom, pointed out how desirable it would be to have the same low rates as on inland

letters charged on letters passing to and from the colonies. This remarkable man concluded with the memorable words : "There is perhaps scarcely any measure which would tend so effectually to remove the obstacles to emigration, and maintain that sympathy between the colonies and the mother country which is the only sure bond of connection, as the proposed reduction on the postage of colonial letters."

Had Sir Rowland E'll known of the means of instantaneous communication which, since his day, has been placed at our command, he assuredly would have viewed it as the most civilizing agency of the century. He would have seen that while promoting the activities of trade and commerce and improving the well-being of the human race, nothing would more tend to deepen the sympathies of our people and make firm the foundations of the Empire, than the adding to a universal penny postage, the incalculable advantage of a State-controlled ocean telegraph system encircling the globe.

Holding the views which I have ventured to submit, I feel that in the public interest I should greatly err if I failed to seek an opportunity of giving expression to them.

I have the honour to be, sir,

Your obedient servant,

SANDFORD FLEMING.

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