CIVIL SERVICE COMMISSION

1908

REPORT OF THE COMMISSIONERS

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1908

SPARKS CHAMBERS,
OTTAWA, March 17, 1908.

SIR,—We have the honour to send herewith our report on the operations of the existing Civil Service Act and kindred legislation together with observations regarding the efficiency of the public service as called for by His Excellency in the commission appointing us as Commissioners for such purpose. We also inclose two appendices in connection therewith.

Appendix A. Letter from Mr. A. Blue, Director of Census and Statistics, regarding the increase in the cost of living.

Appendix B. Proposed draft Act to allow the granting of pensions.

We have the honour to be, Sir,
Your obedient servants,

J. M. COURTNEY,
THOS. FYSHE,
P. J. BAZIN.

Hon. W. S. FIELDING,
Minister of Finance.

COMMISSION.

CANADA.

[L.S.]

C. FITZPATRICK,
Deputy Governor General of Canada.

E. L. NEWCOMBE,
Deputy of the Minister of Justice, Canada.

EDWARD the SEVENTH, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith, Emperor of India.

To all to whom these presents shall come or whom the same may in anywise concern.

GREETING :

WHEREAS, in and by an order of our Governor General in Council, bearing date the eighth day of May in the year of our Lord one thousand nine hundred and seven as amended by a subsequent order dated the ninth day of the same month, provision has been made for an inquiry of our Commissioners therein and hereinafter named into and report upon the operation of the Civil Service Act and kindred legislation with a view to the proposing of such changes as may be deemed advisable in the best interest of efficiency in the public service as upon reference to the said Order in Council (a copy of which as so amended is hereto annexed) will more fully and at large appear.

NOW KNOW YE, that by and with the advice of our Privy Council for Canada, we do by these presents nominate, constitute and appoint:

JOHN MORTIMER COURTNEY, of the city of Ottawa, in the province of Ontario, Esquire, C.M.G., I.S.O.

THOMAS FYSHE, of the city of Montreal, in the province of Quebec, Esquire.

PHILIPPE J. BAZIN, of the city of Quebec, in the said province of Quebec, Esquire, to be our Commissioners to conduct such inquiry.

To have, hold, exercise and enjoy the said office, place and trust unto the said John Mortimer Courtney, Thomas Fyshe and Philippe J. Bazin, together with the rights, powers and privileges and emoluments unto the said office, place and trust, or right and by law appertaining, during pleasure. And we do appoint the said John Mortimer Courtney to be the Chairman of our said Commissioners.

And we do hereby, under the authority of Part I. of the Inquiries Act, Chapter 104, Revised Statutes, 1906, confer upon our Commissioners, the power of summoning before them any witnesses and of requiring them to give evidence on oath, or on solemn affirmation if they are persons entitled to affirm in civil matters, and orally or in writing and to produce such documents and things as our said Commissioners deem requisite to the full investigation of the matters into which they are hereby appointed to examine.

And we do hereby require and direct our said Commissioners to report to our

Governor General in Council the result of their investigation together with the evidence taken before them and any opinion they may see fit to express thereon.

In testimony whereof we have caused these our letters to be made patent and the Great Seal of Canada to be hereunto affixed.

WITNESS, The Honourable Charles Fitzpatrick, Deputy of our Right Trusty and Right Well Beloved Cousin the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom and a Baronet; Knight Grand Cross of Our Most Distinguished Order of Saint Michael and Saint George, &c., &c., Governor General and Commander-in-Chief of our Dominion of Canada.

At our Government House, in our city of Ottawa, this eighth day of May in the year of our Lord one thousand nine hundred and seven, and in the seventh year of our reign.

By Command,

J. POPE,
Under Secretary of State.

P. C. 1108.

Extract from a Report of the Committee of the Privy Council, approved by the Governor General on May 8, 1907.

On a memorandum dated May 7, 1907, from the Minister of Finance, stating that while the general principles of the Civil Service Act are regarded as satisfactory, there are matters connected with the operation of the Act and the services and compensation of officials of the government which require more careful inquiry and consideration than can be given by the ministers of the several departments and, therefore, it is desirable that such matters be inquired into by a Commission composed of gentlemen specially chosen for such purpose.

The minister, therefore, recommends that the following gentlemen,—J. M. Courtney, C.M.G., Ottawa, chairman, Thomas Fyshe, Montreal, and J. G. Garneau, Quebec, be appointed Commissioners, to inquire into and report on the operation of the existing Civil Service Act and kindred legislation with a view to the proposing of such changes as may be deemed advisable in the best interests of efficiency in the public service.

That such inquiry should include the following subjects :—

1. General operation of the Civil Service Act.
2. Classification of the service.
3. Salaries.
4. Temporary employment.
5. Technical employees.
6. Promotions.
7. Discipline, hours of service, &c.
8. Efficiency and sufficiency of the departmental staffs.
9. Retiring allowances.
10. Any other matter relative to the service which in the opinion of the Commissioners requires consideration.

That while the service at Ottawa should be the first subject for the consideration of the Commissioners, they be authorized and requested to extend their inquiry to any portion of the outside service that may come under their observation and which the time at their disposal may permit them to take into their consideration.

That the Commissioners be requested to proceed with the inquiry as rapidly as possible with a view to the presentation of their report at the next session of parliament.

That the Commissioners be appointed under the provisions of the statute respecting inquiries concerning public matters and have power to summon witnesses, to require them to give evidence under oath orally or in writing or on solemn affirmation if they are persons entitled to affirm in civil matters and to produce such documents and things as the Commissioners may deem requisite for the full investigation of the matters into which they are appointed to examine.

The minister further recommends that Mr. Thomas S. Howe be appointed secretary to the said Commissioners.

The committee submit the same for approval.

(Sgd.) F. K. BENNETTS,
Asst. Clerk of the Privy Council.

P. C. 1122.

Extract from a report of the Committee of the Privy Council, approved by the Governor General on May 9, 1907.

On a memorandum dated May 8, 1907, from the Minister of Finance, submitting with reference to the minute of council recommending the appointment of Mr. J. G. Garneau, of Quebec, as one of the Commissioners to inquire into and report on the operations of the existing Civil Service Act,—that he now finds it will be impossible for Mr. Garneau to undertake the duties of the Commission.

The minister, therefore, recommends that Mr. P. J. Bazin, of Quebec, be appointed a member of the said Commission, *vice* Mr. J. G. Garneau.

The committee submit the same for approval.

(Sgd.) F. K. BENNETTS,
Asst. Clerk of the Privy Council.

The Honourable,
The Minister of Finance.

REPORT.

To His Excellency the Governor General of Canada in Council.

MAY IT PLEASE YOUR EXCELLENCY:—

The Commissioners appointed under the Commission from Your Excellency to enquire into and report upon the operation of the Act respecting the Civil Service of Canada and kindred legislation; the services and compensation of officials of the government; and other specified subjects including any matter relative to the service which, in the opinion of the Commissioners, requires consideration, have the honour to report as follows:—

The Commissioners in undertaking the inquiry felt greatly the responsibility and importance of the duty placed upon them, and, as their investigations proceeded, they became more and more conscious that they had undertaken a work of no ordinary magnitude, involving far reaching consequences should the conclusions arrived at by the Commissioners and their recommendations receive the approval of the government and the sanction of parliament. The responsibilities of the Commissioners and the magnitude of their task have not been lessened by the fact that three sets of Commissioners have previously reported on the same general subject. Notwithstanding these reports each succeeding year has seen some measure placed on the statute book dealing directly or indirectly with the subject.

The Commissioners report that in the short and possibly inadequate time at their disposal it has become very evident that in the present state of the development of Canada important changes are required to maintain the Civil Service as an efficient, contented and useful part of the machinery of administrative government.

The Commissioners at the outset felt it necessary to procure from some authoritative official a statement showing the advances in prices in Canada of commodities during the last fifteen years. They therefore requested the Director of Census and Statistics to kindly have prepared and favour them with such a statement. The statement is published as an appendix to this report. In taking this course the Commissioners considered that, as part of the report presented by the Civil Service Commission of 1892 (fifteen years ago) consisted of a draft Act of Parliament laying down certain scales of salaries, it would be desirable that steps should be taken to ascertain the relation of the cost of living between the years 1892 and 1907, in order to obtain a ratio for any increase in the scales of salaries if it were deemed requisite and necessary that such increase should be made. In connection with this statement from the Director of Census and Statistics, the Commissioners respectfully refer to the carefully prepared statement from the Civil Service Association at Ottawa, printed with the evidence and appendices, and also to the statements made by the several witnesses from places outside of Ottawa.

The Commissioners in the next place considered it desirable to take the evidence of Messrs. Thorburn, DeCelles and Glashan, the members of the Board of Civil Service Examiners, in order to ascertain the course adopted to satisfy them as to the necessary requirements from candidates for admission to the public service in regard to age, health and moral conduct; and further, to ascertain whether the examinations on the several papers prepared by and under the direction of the Examiners were such as to secure the best candidates for admission to the service. Two of the members of the Board have held office since its establishment in 1882; the third, Dr. Glashan, well known in connection with educational affairs, has held office

for some twelve years. The evidence given by the three Examiners is interesting and instructive.

The Commissioners considered that it would be probably beyond their powers to ask that members of the staffs of the Senate and House of Commons and of the Supreme and Exchequer Courts should come before them, seeing that in 1892 the Civil Service Commissioners were authorized to extend their enquiries to the staffs of the Senate and House of Commons but on constitutional ground the clerks of the two Houses objected thereto. Having finished the work referred to in the preceding paragraphs, the Commissioners procured the evidence of the deputy heads of the several departments at Ottawa. This the Commissioners considered advisable as they were of opinion that the work of administration lay largely with the deputy heads, and that it would be as well not only to procure their several opinions as to the operation of the Civil Service Act, but also to obtain information as to the kind of work absolutely performed in each department, in order that the same might be on record and that Parliament might be in a position to know the extent of the duties and their widely varied character, the several departments are called upon to perform.

In addition to the examination of the several deputies the Commissioners deemed it advisable to let all the members of the public service know that they would be glad to receive any statement or information which was considered advisable to lay before them, and all the members of the public service who wished to have a hearing were invited to come before them. Moreover, as a reference was made in the Commission to the advisability of inquiries being made, if time permitted, into the working of what may be called the outside service, the Commissioners considered it advisable to go outside of Ottawa. They therefore visited Montreal, Quebec and Toronto. They exceedingly regret that the short time at their disposal prevented them from going to other places—more particularly to Winnipeg and the cities in the Northwest Provinces and British Columbia—as it was represented to them that the difference in the rates of living in the Northwest Provinces and at the coast was considerably greater than the cost of living in the east. Fortunately the Commissioners were enabled to have a delegation of representative members from Winnipeg come before them.

Before leaving this branch of the report your commissioners beg to point out that, in the printing of the evidence, they have departed from the chronological order in which the witnesses appeared. and have grouped the evidence of witnesses from the several departments together, so that anyone desiring to refer to the Post Office Department or any other department might find everything that was presented to the commissioners from the members of the department concerned. In collating the evidence the departments have, as far as possible, been put alphabetically—as agriculture, customs, finance, &c. In this way reference can be easily made to any department by those who desire information thereon.

The number of officials who came before the commissioners to give testimony was somewhere about 218, composed of officers of all grades in the public service, of all departments and of both the inside and outside services. The Commissioners, from having been brought into contact with such a large number of officials, consider that in many instances they carry on their work with commendable zeal and often with scant remuneration.

Your Commissioners, in the opening paragraph of the Order in Council upon which the commission was issued, find that the minister states in his report upon which the order was founded that 'while the general principles of the Civil Service Act are regarded as satisfactory, &c., &c.'

Your Commissioners, while deferring to an expression of opinion from so eminent a source, have had impressed upon them all through the course of their investigations that in some respects certain features of the Act, and features involving principle, might be simplified and improved.

THE CIVIL SERVICE ACT, R.S.C., 1906, CHAPTER 16.

The Commissioners beg to point out certain sections which might with some propriety be amended. Generally speaking it is the opinion of the commissioners that the Act is too long and too involved; that it deals with many subjects of varying importance, from the examination of a candidate for admission to the service to the keeping of attendance books and the granting of leave of absence. The commissioners consider that dealing with principles the Act might be amended in the direction of simplification.

Beginning with the several sections, taking first section 3, the definition of the Civil Service appears to the Commissioners as rather complicated and might be improved. They consider that subsection 2 of section 3 might be eliminated as they cannot see any reason why there should be special legislation for one department.

In section 6, where the Governor in Council is given authority from time to time to determine the number of officers in each department, the Commissioners consider that it would be desirable to add these words 'on the reports of the deputy heads of the several departments' after the words 'required for the working of the several departments in each division of the Civil Service.'

Coming next to the several sections dealing with examinations the Commissioners wish to direct attention to section 20, subsection (*b*) as follows:—

That a candidate to be admitted to the preliminary or qualifying examination must satisfy the Board 'that he is free from any physical defect or disease which would be likely to interfere with the proper discharge of his duties.'

As it often happens that a successful candidate may not enter the public service for some time after having passed the examination, it would seem to the Commissioners that there should be a limited time at least for which medical examination should run, and that after a year fresh evidence of good health should be submitted to the Board of Civil Service Examiners. The Commissioners also beg to point out that besides a certificate of good health no person should be admitted to examinations unless his character is such as to qualify him for employment in the service. As only one certificate as regards moral character is required by the Board of Civil Service Examiners it is quite within the bounds of possibility that there may be collusion between the candidate and the giver of the certificate. The Commissioners consider that, as in the case of examinations for the Imperial Civil Service, three certificates as to character should be submitted to the Board at the time of examination. By section 21 there is an arbitrary time when the preliminary and qualifying examinations shall take place. It might be that in the general interests of the service examinations should be made more often. As it frequently happens there is a delay in examination and there is a tendency as a result to admit persons to the several departments for a temporary period until they shall have passed the examination.

APPOINTMENTS.

The Commissioners come now to the matter of appointments. It is laid down that no person shall be admitted to the inside departmental division of the Civil Service other than a deputy head, controller of the railway mail service, on probation or otherwise, whose age exceeds 35 years, or who has not attained the full age of 18 years.

This can be shown to be too inflexible by one example, the recently appointed Assistant Deputy Minister of Finance, a qualified barrister necessary to the department, for whom a special vote of parliament had to be taken before he could enter the service. This might be partly covered by section 37, but as a rule there is a disinclination to use the powers contained in that section.

PROMOTIONS.

The Commissioners cannot see why the special legislation required in sections 44 and 45 should be included in the Act. They have grave doubts as to the utility of special legislation in a general Act of Parliament. In sections 46 and 47, providing for promotions and promotions on probation, it is stated that the head of the department 'shall elect' or 'may reject.' The Commissioners are of opinion that in these two sections the words should be included 'on the report of the deputy head of the said department.'

DEPUTY MINISTERS.

The Commissioners are of opinion that the limitations in the appointment of the Deputy Minister of Justice, the Deputy Minister of Finance and the Deputy Minister of Railways and Canals, as shown by sections 53, 54 and 55, should be struck out. The Commissioners cannot see why efficient officials who have grown up in the service, such as the present Deputy Minister of Finance, should be debarred from receiving the full amount placed by parliament as the proper remuneration of that department. It has been pointed out, and it seems reasonable, that these special provisions placing a higher value upon other qualifications than upon the training of the department itself are not calculated to inspire the members of the service with enthusiasm in the discharge of their duties.

CLASSIFICATION OF THE SERVICE.

As this was a special subject referred to the Commissioners they desire to defer making any remarks until the observations on the Civil Service Act be concluded.

MESSENGERS, PACKERS AND SORTERS.

With regard to sections 79 and 80, relating to the appointment of messengers, packers and sorters, the Commissioners think it would be well that the office of permanent messengers should be restored. As a matter of fact, messengers are really permanent and the practice of obtaining periodically, through the Treasury Board, authority from Council to employ them seems to delay public business.

PRIVATE SECRETARIES.

In the departments which have been brought prominently to the notice of the Commissioners, no redundance appears in the staffs by reason of private secretaries having been placed on the roll of the departments. But where changes in the ministry occur frequently, and where each new minister introduces a new private secretary, it becomes a matter of difficulty sometimes to find employment for the private secretary, and to regulate his emolument after his chief vacates his office. It has been suggested that while the private secretary holds office he should be paid at an established rate and that when he ceases to be private secretary his connection with the department should cease, in other words, that the private secretary should not be regarded as a member of the departmental staff. The provisions of section 81 for paying $600 a year additional to a member of the Civil Service while acting as private secretary should be repealed.

SALARIES.

As this is a special subject referred to the Commissioners they desire, as in the case of the classification of the service, to refrain at this part of the report from making any comment.

TEMPORARY EMPLOYEES.

The same remark would apply to this subject.

LEAVE OF ABSENCE.

The Commissioners deem it puerile to have provisions dealing with this subject placed on the statute book. Very few officers in the public service are entrusted with the same duties. Some officers may be engaged in purely routine work, while others have constantly to attend to high-class duties in the several departments and frequently for long periods of the year to be at the beck and call of the minister of the department when parliament is sitting. The Commissioners consider that anything relating to leave of absence might be struck out of the statute and dealt with by rules laid down by the Treasury Board.

ATTENDANCE BOOKS.

The same thing might, in the opinion of the Commissioners, be applied to the mandatory sections regarding attendance books. No doubt these books are kept in a way, but as in some departments it would be utterly impossible for any deputy to keep such a book, and as no doubt a great deal of the work is perfunctory, the Commissioners consider that it would be more desirable to do away with the section relating to the attendance books and have regulations on the subject made by the Treasury Board.

Your Commissioners have so far dealt with the paragraph in the order of reference stating that 'while the general principles of the Civil Service Act are regarded as satisfactory, &c., &c.'

From the inquiries made by the Commissioners and the evidence submitted to them they are constrained to declare that they are unable to agree with the expression of opinion contained in the order of reference, and they are of opinion that the repeal of the Act is really the best course to pursue in the public interest. What should be given in its place the Commissioners will state when they come to that part of the report in which they make recommendations.

To begin with, the principles laid down in the Civil Service Act are that in the minor positions the preliminary and qualifying examinations shall be passed for entrance into the public service, but several appointments and many promotions are exempted from the provisions of the Act.

In the appropriations granted by Parliament for the year ending 31st March, 1906, during the last session of Parliament, over fifty votes were passed with the saving clause 'Notwithstanding anything to the contrary in the Civil Service Act'; and as it is known to the Commissioners that many of the votes not having that clause attached to them now have had it in previous years, it is the belief of the Commissioners that hardly a vote to pay the several classes of the public service has been passed, during one session or another by Parliament, without adding the limitation already noted.

The Commissioners find that in the working of the public service there is a constant attempt to evade the examinations by grading under other names certain classes of officials whose classification is not laid down in the Civil Service Act—as, for example, the officials called examining officers in the outside service of the Customs Department. The Commissioners also find that in order to meet the pressure brought upon the several departments by influential politicians to take on assistants, officials who have not passed the examinations are employed temporarily and are called labourers. Patronage seems to run more or less through every department of the public service. It was the universal feeling amongst the officials who gave evidence before the Commissioners that this patronage evil was the curse of the public service. Many of the witnesses were very frank on this subject, and the Commissioners earnestly recommend that all persons who are interested in the maintenance at a high state of efficiency of the administration of the affairs of the Dominion should very carefully consider the evidence submitted on this point with this report.

It would seem that in the four post offices examined into by the Commission

letter carriers were employed to do high grade duty and duties of clerks ; that they are still designated on the pay list as letter carriers ; that in consequence of a desire on the part of the officials not to bring these letter carriers in their uniforms to the public notice, they to their loss have been deprived of their uniforms as well as their street car fares. In that special branch of the public service politics was found, as a rule, to play an important part. The Commissioners consider from the evidence submitted to them that on the part of responsible officials of the several departments, especially in the outside service, there is a dread of the politician, and every bit of strategy is resorted to to circumvent the carrying out of the patronage system.

The Commissioners also found in one department a clerk who is employed to do certain work in the accountant's branch. This clerk came into the service under a special clause, was utterly unfit to do the duty entrusted to him, and his work has to be done in spare moments by his immediate superiors. As a consequence the work is steadily and gradually going behind. The Commissioners have no reason to doubt but that the same result obtains in other departments and that many officials have been appointed to do work for which they are unfit.

The Commissioners have to draw attention to another set of circumstances which has cropped up during the last few years and that is the great redundance of women appointed to the junior branches in the inside service. The Commissioners have not the figures relating to the numbers presenting themselves for examination during the month of November last, but one of the Commissioners who visited the House of Commons found that that Chamber had been set aside for women, while a great proportion were distributed in other rooms of the building. In Ottawa in 1906, out of the 206 candidates who passed the qualifying examination, 121 were women. The lower grades of the Post Office, where there are 366 employees altogether, and the lower grades of the Department of the Interior where there are some 500 employees, are practically filled up with women. While the Commissioners readily acknowledge that many women are thoroughly entitled to succeed in the public service, yet the influx of such a large number must, if continued, in the course of time utterly swallow up the lower grades of the service and by limiting the field for promotion to the higher classes prove detrimental to the development of the higher and more responsible branches of the service ; for it can hardly be admitted yet that the work devolving on the departments can be carried on with a staff composed entirely of women.

The Commissioners have had it brought painfully to their notice that in the great development which has taken place in the last few years in the Dominion, the character and quality of the male candidates entering the service has declined. Having no inducements held out to them to remain in the service the better class of men stay but a short time and leave to better themselves. The Commissioners see with regret that in many parts of the Dominion able and worthy young men attracted by high emoluments have left the service. It is becoming more and more difficult to fill their places.

The Commissioners have also to point out that as far as regards the Civil Service Act the officials embraced in the terms of the Act are limited in number. At Ottawa 350 employees of the Department of the Interior are outside the terms of the Act. A very great number are also outside the provisions of the Act in the Departments of Agriculture, Marine and Fisheries, Public Works and Railways and Canals. This prevails more or less in the other departments. Only three departments in the outside service—Customs, Inland Revenue and Post Office—are included in the schedule under the Act, and while, as has been pointed out, many officials in Ottawa are excluded, the same remark applies with greater force to the members of the public service employed elsewhere than at Ottawa. No Dominion Lands Agent, no Indian Agent, no officer of the Intercolonial Railway, no outside officer of the Public Works Department is under the provisions of the Act, and members of the Northwest Mounted Police, together with many other sets of officials, are excluded from its provisions. In fact, the terms of the Act only bring under review a very limited

number of the members of the outside service and probably about one-half of the members employed at the seat of Government.

The Commissioners also beg to point out that in the list of passed candidates published in the *Canada Gazette* no attention is given to merit. The candidates are gazetted alphabetically. No doubt it has happened that the candidates who have just fluked through the examination by means of greater political influence have received appointments over the heads of more worthy and better qualified candidates.

In the matter of promotions the same patronage fear is apparent. Your Commissioners found in their rounds that a collector of customs, a city postmaster, a post office inspector and others were appointed politically. The recent appointment of a postmaster at Kingston was on the recommendation of the Patronage Committee; the last appointment to the postmastership at Montreal, the most important in the Dominion, was given to an aged member of parliament, 67 years old.

As the almost universal practice is that no person is promoted out of his district and transferred to higher duties in another place, and that with few exceptions no person is promoted out of his class, it follows that young men, entering the public service in the several divisions to which they have been appointed, see that however hard they may work, and whatever intelligence they bring to bear upon their duties, there is no chance of getting out of the class to which they are appointed. Your Commissioners have been told and believe that promotions have been made as a matter of politics, not in every case, but in many cases, and that people have been brought in from the outside over the heads of men who have given their lifetime to the departments, to fill the few positions of any superiority in the public service. For these and other reasons your Commissioners are of opinion that the general features of the Civil Service Act cannot be regarded as satisfactory.

With these remarks by way of preface the Commissioners beg to take up the several points which have been specifically referred to.

GENERAL OPERATION OF THE CIVIL SERVICE ACT.

In the previous remarks your Commissioners have pointed out that in their opinion the principles underlying the Civil Service Act are not in the public interest. In the report of the Royal Commission of 1892 the Commissioners observed that: 'It is possible that public sentiment in Canada may not as yet be ripe for open competition generally, and it may not be possible as yet to eliminate altogether the power of politics in making appointments; but if the recommendations of your Commissioners be accepted and strictly adhered to, the public service at Ottawa will, they are convinced, in the course of a few years, be better for the change.'

The Commissioners at that time only took into account the public service at Ottawa. They left in their draft bill in the report the provisions of the former Act relating to the outside service. Your Commissioners regret to state that in their opinion the hopes of the members of the former Commission have not been realized. The provisions of the Civil Service Act and its amendments have not made the service any better; in fact, the Act has been so amended, reamended, and whittled down, that the public service, the Commissioners believe, not only at Ottawa but elsewhere throughout the Dominion, has fallen back during the last fifteen years.

In making these remarks the Commissioners do not wish it to be considered that any blame is to be attached in particular to either of the political parties who in turn have administered the government. It is the political element in the Act which, from time to time, has become more aggressive and which has steadily tended to deteriorate the public service. It would seem to the Commissioners that the great prosperity of the country during the last fifteen years has been such that able men, who were formerly attracted to the service of the state have now ceased to look to the rewards of that service and have turned their attention to other avocations in which they see prospects of higher emoluments, with the result that inefficient and inferior men, unable to obtain better positions in the outside world, through political

operations and other means, have been brought into the service; whatever the cause the tendency is more and more to lower the standard of the Civil Service with the consequent detriment to the business of the state.

Your Commissioners do not consider it necessary to dwell long on this subject, but will now take up the second point in the reference.

CLASSIFICATION OF THE SERVICE.

Taking first the inside service, your Commissioners beg to observe that in their opinion the uniform idea of classification for all the departments has failed in the working. The scheme of classification of the officers coming under the working of the Civil Service Act as at present laid down is deputy head, chief clerks, first class clerks, senior and junior second class clerks, third class clerks, temporary employees and temporary messengers. In the examination of the several witnesses one deputy head frankly declared that he disregarded and took no account of the classification at all. In the department in question, the Department of Justice, where the chief officers are barristers of talent, called upon to advise upon the highly complicated affairs involved in the administration of the several departments, a classification would naturally be presumed to exist differing from that required for the many officers employed in the oversight and administration of the 11,000 odd post offices administered by the department of the Honourable the Postmaster General. It would therefore appear that what might be good and useful in the present system of classification in some of the larger departments might not be altogether as useful or proper in the administration of departments having fewer officials, such as the Department of Justice, Department of the Secretary of State, or even the Finance Department. Taking it all in all, while the present system of classification might be held sufficient for some of the larger departments where the work is not of a special class, some provision should be made to adapt it to other departments differing in the character of the work to be done and the nature of the staff required. The only common official of every department is the deputy head—that office is of course a necessity.

With regard to chief clerks, the Commissioners found that while in some departments these officials are entrusted with duties of the highest character, in others the chief clerks seem to have been appointed simply from length of service without change of duty and without being given any work of a higher character than that which they had previously performed. It will be found, for instance, that a chief clerk in one department may have the review of all the capital cases of the several courts of justice on whose report the life or death of criminals may depend. In another a chief clerk may be found whose sole duty is to dole out the forms and stationery in use in the department. The same remarks in a great measure may be applied to the first and second-class clerks. Frequently officials are promoted to the higher grade without change of duty, simply as a recognition of long service, and with the amiable intention of adding to their emoluments. In other departments the several grades are classified as in a regiment. Probably in one department there may be five or six chief clerks with a total staff of forty officers, while in the Post Office Department, where there are nearly 400 officials of all classes, there are ten or a dozen chief clerks.

Your Commissioners are of opinion that the classification should be placed on such a basis that each department should be graded according to its wants and requirements. Generally speaking your Commissioners are of opinion that while the higher officials should be treated by themselves, the vast majority composing the public service should not be merely, as at present, classified in grades which cannot but tend to bury individualities, but the principle should never be lost sight of that promotion and pay should in every case depend on individual merit, and that, therefore, every individual in the service should, as it were, be under continual appraisement and be eligible for promotion to any position in any division of the service.

SALARIES.

Your Commissioners now come to the third point in the reference, the question of salaries. On this point the Commissioners have had very grave anxieties in arriving at a conclusion. It may be said, as was the case in 1892 when the late Commission reported, that the men of the higher classes of the public service are paid less in proportion to the value of the work than they would have received had they been employed by the railways, banks and the large mercantile corporations. Probably it may be still the truth that the percentage of officials enjoying salaries in the middle rank from $1,000 to $2,400 is larger in proportion in the service than is obtained in the outside world. Your Commissioners consider that, taking all in all, the percentage of those employed in the public service in the lowest ranks are paid less than they would have received had they been employed in outside occupations, and less than modern conditions demand. In making these observations the Commissioners are only taking into account the salaries and emoluments drawn by male clerks in the service.

Your Commissioners have found in their examinations that as a rule the salaries laid down in the Civil Service Act have been pretty constant for the last 30 years. Thirty years ago the present fiscal policy of Canada was not in existence and its introduction since has unquestionably largely increased the cost of living. Owing to the small mileage of railways and to the lack of communication, most of the necessities of life raised in the different localities were consumed locally. Butter, eggs, meats, food-stuffs and articles entering into daily consumption were produced in the locality in which they were consumed. The same characteristic feature was applicable to domestic servants employed in the households of the officials in the public service. A generation ago there were no means by which the farmers' daughters could remove easily from the locality in which they were born, and as the supply of domestic servants was then greater than the demand, the wages paid were comparatively small. Now, through extended communication the classes of domestic servants can find wider fields, and, as a consequence, the demand is much greater than the supply, and the rates of wages have gone up by leaps and bounds. The civil servant in those days, although not in receipt of a large income, had his wants satisfied cheaply and without stint. In these days of cold storage and rapid transit, the products of the farm find their way to the motherland and distant countries, and the civil servant, rejoicing still in the same salary which was paid 30 years ago, finds his purchasing power sadly diminished, and is forced to face circumstances which are sometimes cruel in their operation, especially in the case of the younger members having families. Your Commissioners have heard from officials and from groups of officials, one after another, the most harrowing details of the privations endured by them in providing for those dependent on them. And as nothing so unfits a man for the faithful performance of his daily work as the constant worry over money matters, your Commissioners consider that in dealing with the question of salaries greater consideration should be shown to the very different circumstances existing at the present time than existed thirty years ago.

Reverting to the higher officials and taking the salaries of the deputy heads, your Commissioners find that while the salary of a deputy head is laid down in the Civil Service Act as $4,000, yet in a late vacancy in one of the departments the deputy selected could only be appointed by giving a much greater remuneration; in fact, an arrangement was made whereby the deputy head in question was allowed a remuneration of $7,500 a year. Only one other deputy has an annual salary greater than that laid down in the Act, and that is the Deputy Minister of Justice who receives a salary of $6,000 a year. With the exception of these two deputies—the Deputy Minister of Railways and Canals and the Deputy Minister of Justice—all the other deputies have salaries of $4,000 per annum or less; for, like other officials, the deputy receives an annual increment until the maximum is reached. Your Commissioners

are of opinion that in the case of deputies the annual increment is a mistake. Looking at the importance and class of work entrusted to them and the responsibility attendant on their position, your Commissioners consider that no highly efficient deputy head, doing his duty thoroughly, should be paid less than $5,000 a year. Your Commissioners have to point out that in the very great stress laid upon the minister a deputy head has more and more to take the responsibility of administration upon his shoulders, and when it is borne in mind that deputies are entrusted with such business as the development and settlement of the Northwest; the control of the finances involving a turn over of a million dollars a day ; the administration of over 11,000 post offices ; the looking after the patent laws and copyrights, besides the other work proper of a Department of Agriculture ; the supervision of an expenditure aggregating eighteen millions annually, together with the administration of the canals and railways of Canada under Government control, and the supervision of matters relating to railways throughout the land ; not to mention others whose work is also of very great importance, your Commissioners have arrived at the conclusion above stated.

Coming now to the chief clerks, the first class clerks and other officials employed in the daily work of the several departments, not including what are called technical officers, such as engineers, &c., your Commissioners have the following remarks to make :

With regard to the salaries paid to these officials your Commissioners have to remark that in the examinations which they have held they find that in some departments promotions have taken place as a rule for other causes than the necessities of the service. This was enlarged upon by the Commission which sat in 1892. The Commissioners have also found that in some departments there seems to be an inordinate amount of detail, while in others the service seems to be performed without unnecessary superfluity of detail. Your Commissioners are of opinion that while with the large body of officials making up the public service it may be necessary to arrange them into classes, yet it is desirable as far as possible to encourage talent wherever it may be found ; and for this reason the increments should be adjusted or proportioned as much as possible to the varying ability and efficiency of each officer whether senior or junior, and that in most cases, where a growing efficiency on the part of the officer is admitted, an annual increase of $100 should be given until a maximum is reached.

Your Commissioners do not see the necessity of elaborating the classes that are now in existence ; in fact, they wish to emphasize the remarks already made respecting individuality in the service. Of course, in the remarks which are now being made the Commissioners are limiting themselves to the conditions in the inside service. With regard to the lower grade officers and their salaries it is difficult to obtain proper assistance at a minimum salary of $500 unless the service is altogether recruited from Ottawa. This would be disadvantageous to the public interests, your Commissioners consider, and they would recommend that instead of a minimum salary being mandatory for entrance to the public service, a certain amount of relaxation of this rule should be allowed, and if it were necessary to obtain assistance at the rate of say $700 per annum it should be within the reach of the department to obtain such without asking Parliament for a special vote.

TEMPORARY EMPLOYMENT.

Your Commissioners have now to come to the fourth heading, namely, temporary employment.

The theory of temporary employment is that in times of emergency and pressure, when extra assistance is required, such as the distribution of letters at Christmas, temporary employment should be given to people qualified to do the work. In the examinations made by the Commissioners this idea of temporary employment only occurs in the instance above cited. So-called temporary clerks are constantly admitted to the service and remain in the service until their death. There are temporary employees at Ottawa who have been there for over thirty or forty years.

In other instances of temporary employment people who have failed to pass the necessary examination, through political pressure or otherwise, have been unloaded on the departments when help is necessary and to overcome the provisions of the Act are graded as labourers or some such designation.

In Canada where expansion must be the rule for many generations to come, the business of the Government must constantly extend, and the idea of people being employed for temporary emergencies is contrary to fact. At the same time it is desirable for a lower grade appointee to be employed in a probationary capacity until after a period of service, and his fitness for work has duly been proved and certified to by the proper authority. All these temporary employees might be grouped under the heading of what is called in Great Britain the 'writer class.' But as vacancies occur in the higher divisions by selection or promotion a duly qualified member of the 'writer class' should have an opportunity to advance to a higher grade.

TECHNICAL EMPLOYEES.

Coming to the next subject, that of technical employees, your Commissioners have given it grave consideration. This class is continually enlarging its borders Formerly it was confined chiefly to engineers, architects and surveyors. Now it also includes officers as the Director of the Experimental Farms, Director of the Census and Statistics, Superintendent of Insurance, the Dominion Archivist and officers of public health, immigration service and officers above the other grades and classes too numerous to mention. In the progress and development of Canada the services of technical officers will be more and more employed, and even in the departments themselves such officers will be in the future appointed to act between deputy heads and other officials. That these men should be well paid for the services they perform should go without question, and not only should their emolument bear some proportion to their sphere of duties, but steps should be taken to render their office stable and not liable to change.

How to arrive at the proper emoluments to be paid to such a diversified class as technical employees is rather beyond the subject of the present report. The only suggestion your Commissioners can make is that each case should be taken and considered on its own merits, and by some means or other the whole of the technical officers in the employment of the Dominion of Canada should be brought under the survey of the Acts and rules governing the Civil Service.

PROMOTIONS.

This subject was dealt with by the former Commission of 1892 and forms a paragraph in their report.

In Canada there exists a system of promotion examination which is not in use in Great Britain. So far as your Commissioners can find the same process prevails now in regard to these promotion examinations, even to a greater extent of undesirability, as prevailed in 1892 when the last Commission reported. In some cases strict examinations under the regulations laid down by the Civil Service Examiners have been made when promotions were considered necessary. In others only what is absolutely legal has been required, and the examinations have been held in only one or two subjects, such as 'duties of office.' Your Commissioners consider that in many cases promotions have been forced on the several departments owing to political influence; that the officials promoted do the same work as they performed in the lower grade, and, as has been mentioned before, promotions have taken place as a rule for other causes than the necessities of the service. In the recommendations which will follow at the conclusion of this report your Commissioners will indicate what they consider necessary under this head.

DISCIPLINE, HOURS OF SERVICE, &c.

Without going so far as to say that the official who has been appointed through political influence and whose friends are in power is not amenable to discipline, the Commissioners have found in certain instances that officials appointed by virtue of political patronage and remaining under its ægis have taken to themselves the idea that their services are altogether beyond the control of the higher officials; that, in fact, except from observance of office hours, their country or their chief is of no consideration. That the annual increase will follow is a matter of course, for their immediate superior in his report would not say absolutely that they were disobedient. Your Commissioners are agreed that in the expansion that has occurred in Canada in recent years, which has been followed by a large increase in the ranks of the Civil Service, the later arrivals do not actively respond to regulations laid down in the government of the several departments.

An official entering the public service should be made fully to understand that when once he becomes an official any attempt to obtain or use political influence must be abandoned.

In 1879 a Treasury Board minute was promulgated to the effect that in the case of an official using political influence it would, if discovered, be tantamount to the handing in of his resignation to his superiors. It would be as well, your Commissioners consider, that this minute should again be promulgated, that each officer in the public service should be made to sign it and that officials should be given to understand that not only was it to be obeyed in the spirit, but in the letter.

With regard to the hours of service, the Commissioners find that in almost all the departments the higher officials and those attendant upon them, such as their stenographers, &c., leave when the day's work is accomplished, and that officials of this character frequently put in a tiring and exacting eight hours a day's work or more. With regard to the officials employed in the inside service at Ottawa on ordinary routine work, it is desirable, in the opinion of the Commissioners, that the several departments should manage each its own affairs. It is not desirable to lay down fixed hours or to compel officials to remain in the department when their day's work is done. The work of departments differs as to the manner and time in which it can be done, and different seasons require different regulations. In the summer when parliament is not in session and the days are long, it is desirable that the day's work should not be prolonged beyond a reasonable hour. But when Parliament is in session and a greater amount of work has to be performed, and returns have to be answered, it would not be without reason that the officials be called upon to give a greater number of hours in the day's work than would be necessary during the summer. It seems to the Commissioners that the method adopted by the Auditor General in dealing with his staff might be recognized by the several departments in the inside service.

EFFICIENCY AND SUFFICIENCY OF THE DEPARTMENTAL STAFFS.

In dealing with this subject your Commissioners have to submit that in the vast service such as exists at Ottawa, in the limited time at their disposal, it has been absolutely impossible for them to inquire fully into the efficiency of the officials in the several departments. There are probably, including labourers, some three thousand employees at Ottawa. In the Department of the Interior alone there are five hundred employees. In that department the junior branches are made up almost entirely of women. As has been pointed out, in Ottawa seven hundred women are now employed. That is a fact that must be taken seriously into account in considering the future of the service. It would take many months to examine the work of the Department of the Interior alone, and when so many officials are engaged in the several branches it would be hard to gauge with accuracy the extent or character or style of the work turned out by each. Generally speaking your Commissioners have found that the several officers who have appeared before them are gentlemen

possessed of proper training, sensible of their responsibilities and anxious and desirous of giving their best services to the interests of the state. But it is useless to put aside what has been brought prominently before them by almost all the witnesses, and that is that owing to the development of the country it has naturally become more difficult to attract good men to enter the public service and devote themselves to it. The newcomers are in general not found to be as reliable or as efficient as the employees of previous years.

As regards the question of efficiency, while the Commissioners do not for one moment insist that the work is not done, yet in their opinion the work in many of the departments might be better done.

RETIRING ALLOWANCES.

At the outset your Commissioners consider it a subject of regret that the Superannuation Act, which had been in force for over twenty-seven years, should have been repealed, and the present Retirement Act put in its place. To the Commissioners the repeal seems most illogical; when it is found that within a few years after its repeal Pension Acts have been placed on the statute book providing for pensions to the members of the Northwest Mounted Police, the staff of the Intercolonial railway, the members of the Permanent Corps and Headquarters Staff, and other employees under the Militia Department, as well as to their widows and families, it would seem that the action in abolishing the Superannuation Act was not only illogical but hasty and inconsiderate. So many papers have been written and so much has been said on the subject of superannuation that your Commissioners do not consider it necessary to expatiate at length upon it. A lengthy memorandum upon the matter was prepared and submitted with the last report on the Civil Service made by the Royal Commission in 1892. It pointed out that not only was the system of superannuation in the best interests of the state but economical in practice, leading to stability in the working of the service; for without any superannuation system it simply means that it is impossible to get rid of the aged members, and men would be retained in the public service to an advanced age and long after their usefulness had departed, for the reason that it would be hard and cruel to discharge them. This would result not only in the abnormal increase of the staff of each department in course of time, but the older being necessarily the higher paid, their retention would serve to prevent the active staff, on whose shoulders the bulk of the work would fall, receiving the higher scales of remuneration to which they would be entitled. In modern days a pension system is recognized as a necessity by almost all banks and large corporations; and even religious bodies provide for the old age of their ministers. Amelioration has also been granted to judges on their retirement. In many cases judges can be retired on their full salary; and in the face of this does it not seem wrong and cruel that, except in the case of a few favoured officials, there should be no provision for sickness, debility or old age throughout the public service except the Retirement Fund, which is no provision at all? The present progressive conditions of life in Canada will undoubtedly continue, although from unlimited speculation or an occasional bad harvest there may be times of temporary retardation; but from all appearances the cost of living does not promise to decrease, and the salaries of public officials being barely sufficient to pay necessary expenditures, will prove insufficient to provide for their dependents after death. Owing to these considerations your Commissioners are of opinion that it would be desirable that not only should a Superannuation Act be re-enacted, but its sections should include provision for the support of the widows and orphans of deceased public servants. An Act drafted to this effect has been placed at the disposal of the Commissioners and will be appended to their report. It has been pointed out over and over again that not only is it the tendency for inefficient men to enter the public service, but the effective members who have essayed the service and who see but little hope of the future, having no superannuation in view for their declining years, abandon it to better themselves. Not

only do the young and enterprising officials leave, but some of the chief officials, men of well known character and ability such as Messrs. Bain, Riley, Ruel and Stewart of the Interior Department have abandoned the service for outside employment, and it seems hard that men who are engaged in the construction work of the Dominion, who give their best endeavours to their country in the responsibility of carrying through great public works, the development of agriculture, and all the services which go to building up the Dominion, should have nothing to look forward to when old age overtakes them and their work is over, while the favoured few and the police of Canada should be carefully protected, and not only themselves but their widows and children. The sooner, in the view of the Commissioners, a Pension Act is placed on the statute book, the better it will be for the interests of the Dominion.

Your Commissioners have had the services of Messrs. Fitzgerald and Grant of the Insurance Branch of the Finance Department to aid them in devising an Act, and the rate of abatement has been fixed and based upon the average at which employees enter the inside service. Of course, when men well advanced in years are appointed postmasters and collectors of customs it would follow that the average age for the outside service is much higher than the average age for appointments in the inside service; but until the political element is cast aside from the public service that condition of affairs will always prevail.

Your Commissioners have had brought to their attention a clause in the Superannuation Act which enabled the government to add a term of service not exceeding ten years to officials who, after the age of 30, entered the public service for special or technical reasons. Your Commissioners find that with one exception the advantages of this provision have not been extended to any retiring official within the last ten years. The practice in the case of deputy heads and high officials was universal in the past and its extension is still legally applicable. It was well understood that when officials appointed to high positions for special or technical reasons came to be superannuated additional terms of years would be granted to their service. Your Commissioners are only aware of three or four instances at the present moment in the public service which would fall within this category. First, the King's Printer, who for very special reasons, was called upon by the government to re-organize the Printing Bureau in 1891, then being over 50 years of age. His case was pointed out individually in the report of the Civil Service Commission of 1892. Second, the Deputy Minister of Trade and Commerce, who entered the service as assistant commissioner of customs, having left the bank in which he had become a manager; the third is that of the Superintendent of Insurance, who was absolutely promised that he would be treated in the same manner as his predecessor was treated when he retired from the service; that is to say, that a term of years should be added to his service. Your Commissioners trust that if in the near future any of these officials should find it necessary to retire from the service the circumstances under which they entered the public service should be taken into consideration, and that such length of service should be added to their actual service as would enable them to be retired according to the promises made to them on their appointments.

Your Commissioners have now to consider the advisability of naming a fixed age at which officials should leave the public service. Compulsory retirement at a fixed age is the practice in Great Britain, the age laid down being 65 years. The fixed age has two great advantages. First, it relieves the state or the minister from the importunities of officials who wish their services to be kept on after their faculties are impaired. And second, it prevents the retirement of men under the age to make places for political officials. So strict is the rule in Great Britain that there are only three reasons for which the services of an official can be retained beyond the age of 65 years, and even then an extension can only be made for one year, and a report has to be made to parliament of the official whose services are extended together with the reasons therefor. For instance an official may be retained because he is engaged in some important work which it is desirable to complete; or he is doing some work which is in course of transfer to some other part of the system; or for very grave

reasons of state and very great urgency his retention is necessary. Your Commissioners have to point out that during the Boer War, when the treasury of Great Britain had to raise large sums of money, the secretary of the treasury, Sir Francis Mowatt, arrived at the age of retirement. It was decided then that the requirements being so urgent his services should be retained for one year; but only for such grave reasons can the period be so extended.

Before leaving the subject of superannuation your Commissioners beg to observe that, should it be decided that a superannuation Act be introduced into parliament, it should be taken into consideration that in the event of an official dying before being retired, if no better provision could be given, it would be only just and equitable that the abatements deducted from the salary should be paid to his widow or representatives. Many cases of hardship have occurred since the Superannuation Act was placed on the statute-book in 1880. A recent notorious case occurred in Toronto where Mr. Patteson, the late postmaster, after having paid in $80 a year for about 28 years, died while still in harness, and the sums so deducted from his salary became part of the Consolidated Revenue of Canada without any benefit to his widow and orphan. Your Commissioners further consider that in the event of an Act being placed on the statute-book it should have a retroactive effect and due regard should be given to officials of a permanent character who are not under any Retirement Act. Many officials performing duties of great responsibility are under neither the Superannuation nor Retirement Acts. As in the course of time their services will become of less value it is respectfully suggested that early steps should be taken to bring them under a Superannuation Act, if, as was said before, it be determined that a Superannuation Act be introduced into parliament.

Although not pertaining to the subject of superannuation, your Commissioners have had brought to their attention the cases of a class of employees of the Dominion Government whose services are more or less of a hazardous character, such as railway mail clerks, guards of penitentiaries, inspectors doing duty in out of the way places, lighthouse keepers, inland revenue officers engaged in the manufacture of fulminate of mercury and others whose duties entail risk of life or limb. Officials of this class should, in the opinion of your Commissioners, be protected in addition to the superannuation allowance by means of accident policies. In such a large service as that of the Dominion of Canada, where so many officers are employed in hazardous duties, no doubt the rates chargeable collectively would be moderate compared to the rates paid by individuals. Possibly the government might devise a scheme to do its own insurance. Your Commissioners beg to point out that the British parliament has passed an Act under which compensation is guaranteed to employees suffering injuries in the performance of their duties, and this also applies to public servants. With this example before them your Commissioners consider that the question of accident insurance is one of great importance.

A WIDER AND BROADER QUESTION.

Leaving the question of superannuation your Commissioners wish to refer again to the question of efficiency and sufficiency of the service. In addition to the efficiency in the administration of the departments a wider and broader question is raised and that is how far the departments are efficient in looking after the best interests of the Dominion as respects their several expenditures. With this view your Commissioners, in the examination of the several witnesses, asked questions regarding the administration of the several departments, all of which questions are founded on blue books and public records. Your Commissioners have to apologize for dwelling as they propose to do upon the question of the method of granting supplies by parliament in Canada as compared to the mother country, and to the consideration of expenditures in Canada also as compared to the mother country.

Owing to the good times which have recently been prevalent and the large revenues received from Customs, the old-fashioned notions of frugality and living

within one's means have to some extent been departed from, and instances have been found of departments giving orders for stores and other services to be delivered within a year in excess of the vote granted by parliament. Large amounts have been spent at several places in the Dominion for supplies bought from those enjoying political patronage at what may be called retail rates. Heavy expenditures have been incurred without necessary consideration or supervision, and while no doubt the several officers have thought themselves justified, owing to the expansion of the revenues, yet such conduct is contrary to the public interests and, in the opinion of the Commissioners, ought to be restrained.

In Canada the ministry of the day brings down the estimates of the departments. These estimates show the increases and decreases as compared with the supplies granted at the previous session. The supplies are duly voted in the customary course often at the end of the session in the small hours of the night by jaded members in a tired House. When the supplies are granted and released to the several departments the expenditures are made. These expenditures in the course of time are reviewed by the Auditor General and his report is presented to parliament and referred to the Committee on Public Accounts, which is composed of over one hundred members of the House.

In Great Britain the estimates are brought down in a similar manner, but in very recent years these estimates have been accompanied by a memorandum from the Secretary of the Treasury pointing out rather in detail the reasons for the several differences. The supplies are then voted, as in Canada, and in like manner the departments make the several expenditures which are reviewed by the Auditor General and reported upon to parliament. They are then referred to the Public Accounts Committee which, in a House of over 600 members, is made up of fifteen members only, the chairman always being a member of the opposition—generally an ex-Secretary of the Treasury. These fifteen members take the whole of the public expenditure 'seriatim' and spend from 30 to 40 days examining most carefully into the several expenditures and report thereon to the House.

In Canada, during the present session, at the first meeting of the Public Accounts Committee, six members moved for 41 sets of papers. There is no doubt whatever that all these papers moved for are demanded for party purposes and in the expectation that campaign literature may be derived therefrom. Of course it is needless to say that the six members are all opposition members.

Your Commissioners in thinking the matter over have come to the conclusion, and respectfully submit for consideration that, as in Great Britain, the estimates should be prefaced by a memorandum from the Finance Department showing the several increases and decreases in greater detail and with general explanations. Your Commissioners would suggest, though it is not the case either here or in Great Britain that from the House of Commons a small committee be created to be called the 'Estimates Committee' to whom the estimates might be referred for examination before being passed upon by the House, and that such committee should have power to call for persons and papers if considered desirable; the committee to be in the nature of an examining committee to ascertain full particulars of the several votes asked for and any explanations that may be desired. This procedure would in all probability relieve the House from the delays now occurring in committee of supply and would tend to shorten the sessions. It would seem desirable to point out in what manner the Public Accounts Committee of the British parliament perform their duties. In the first, second and third reports of the Public Accounts Committee of the last session in Great Britain, two of which are concerned with the examination of the Navy and Military expenditure, and the third with the remainder of the public expenditures, nothing has been too small to report upon, and almost all the reports, which are well worthy of notice, deal with matters of principle. For instance, the admiralty had been supplied by contract by the same firm since 1890 with what are called lettered hat ribbons. The amount involved was not very great, but in 1905

fresh tenders were invited when lower prices were obtained. In spite of this the admiralty continued for a time with the old contractors until attention was called to the irregularity.

Attention was also called to one of the naval depots where a sum of between six and seven hundred pounds was paid to four stewards to examine and pass ready-made clothing received from a contractor. This was a commission of five per cent. When it was discovered, the men pleaded that they were doing what their predecessors had done, and the contractors stated that it was the custom. An Act of Parliament has been passed called the Prevention of Corruption Act, 1906, which will render similar proceedings very hazardous in future. It was also shown that in the process of manufacture, canvas, which purported to be of pure flax, was found to be adulterated with hemp. The effect of this is that when a manufacturer has been found engaging in such methods his name is removed from the list.

The principle of the lowest tender is rigidly enforced. A question was raised in connection with the contracts for H.M.S. *Invincible, Inflexible* and *Indomitable,* for which (without Treasury sanction) no competitive tenders were invited. The Admiralty stated in explanation that it was 'desired to keep the designs of this class of vessel secret.' The Public Accounts Committee pointed out that 'When any such departure from the usual practice is proposed the sanction of the Treasury should be sought, and if the arguments urged in favour of the proceeding are not good enough to influence the Treasury at the time, they can be of little value when offered as excuses after the event.' In rare cases urgent expenditures have been incurred without previous parliamentary sanction but with Treasury authority, and all this has been pointed out by the Public Accounts Committee as irregular and contrary to the public interests.

In Canada it has been found that articles have been procured (such as cement) by two different departments, one of which procured it on more reasonable terms than the other. The Public Accounts Committee in Great Britain, having found that the Admiralty purchased goods from a firm which was supplying the War Office, made the following minute thereon:—

'Attention having been drawn to a case in which the Admiralty purchased goods from a firm which was supplying the War Office with similar articles on more advantageous terms, arrangements have been made and rules drawn up to ensure a mutual exchange of information on such matters. Your committee are of opinion that this should lead to economy, and suggest for the consideration of the Treasury, that it might be advantageous to extend the system to other departments which have to buy large quantities of stores.'

The Public Accounts Committee in Great Britain also draw attention to the comparison of estimates and expenditures, and the variation between the forecast and the actual outcome of expenditure. The chief department where variations occur is the War Office. The excuse is that under the new system difficulties have occurred and it was stated that 'There is a most extraordinary desire on the part of the Military Headquarters Staff to effect reductions.' But the committee observe that as regards the future 'They are without assurance that the same satisfactory result may be expected. For it has been explained to them that the military directors (who now frame estimates and control the progress of expenditure) are transient officers who come to their post with very expensive notions, and only get to know their work thoroughly by the time they have got to go; and that, as was admitted by the representative of the War Office, the financial shortcomings now under notice may be repeated again, possibly periodically.'

They go on to state that 'It is not for your committee to indicate what administrative steps, if any, are necessary to ensure an efficient system. They confine themselves at the present time to saying that the importance of accurately estimating expenditure and forecasting liabilities cannot be too strongly insisted upon, and that

they hope that the responsible minister of the day will take every means necessary to secure that end.'

The Public Accounts Committee of Great Britain also call attention to payments made under the Military Works' Loan Act in respect of contracts placed without competition, and also to what they consider the high ratio which the cost of the staff bears to the works carried out for the Admiralty. They also draw attention to irregularities in accounting, particularly in a case in which an officer employed on the staff of the Military Loan Works made his accounts balance by putting a savings of one vote against an excess on another and *vice versa*, transferring the sum saved in one item to meet an expense in another. Of course, like other matters of the same character, this was discovered by accident because no receipt was forthcoming for a bill for stone, and an investigation by a court of inquiry was set about. The General Officer Commanding and the authorities of the War Office arrived at the conclusion that it was a most serious irregularity though not a question of fraud, and the officer should be reprimanded. The Public Accounts Committee in commenting on this could not see how falsification of accounts, which in civil employment would have been promptly visited with dismissal, should, in the military service, be punished only by a reprimand. They were informed that a reprimand was a very serious punishment. The committee then go on to observe that uneasiness aroused by this case lies in the fact that an officer of field rank, with a good record, and no idea of fraud, had such a distorted view of his responsibilities and duty that in his letter of explanation, he stated 'I considered that it was quite justifiable to transfer day work from one item to another in some cases so as to adjust the accounts. I did so in the interests of the public service to get the accounts closed.' The committee observed that if such views were prevalent in the service no system of accounting would be of any value.

Your Commissioners have to apologize for these lengthy quotations from the proceedings of the Public Accounts Committee of Great Britain, but in view of the large expenditures in progress in Canada they considered it desirable to point out that in the mother land, where expenditures are much greater, these expenditures are so watched that no contract can be let without public tenders; no expenditure can be incurred unless voted by parliament; and no expenditure can be exceeded without parliamentary appropriation; that the system of accounting should be proper and that generally all expenses incurred should be strictly in accordance with the votes of parliament and with the rules and regulations of the Treasury, and to the observations made by the Public Accounts Committee in their several reports which have been adopted and confirmed by parliament.

The consideration of the efficiency of the Civil Service in dealing with the appropriations granted by parliament brings up another question, and that is the purchase of stores. By the evidence of the several officials who are concerned in the purchase of stores it has been conclusively shown that large amounts of money are paid over each year to merchants whose names are on the *patronage* lists in the several localities. It has been pointed out in the most simple way that this practice has been followed by everybody and it could not be altered. Your Commissioners, however, consider that while the practice was always bad, yet through the great development of the country the extent was not so great as to become serious until of recent years. When one witness stated that his expenditure has increased threefold recently, and it is a well known fact that the public expenditure has increased in the last twelve years about 50 per cent or more, in the opinion of the Commissioners, the time has come when this practice of paying retail prices to a few favoured merchants in each locality should be discontinued. Before suggesting a remedy your Commissioners wish to point out how these expenditures are managed. In the first place there is the question of certificates. These certificates are in general terms, that the articles have been received, that the articles are necessary in the public interests, that the

prices charged are according to contract, or that the prices are fair and just. In reference to the question of certificates the Auditor General in his evidence pointed out that in one department he did not believe in the certificates received. This is a very serious affair. Generally speaking the Commissioners are of opinion that the certificates should be given in the first place by the officer who really receives the goods; or to quote a witness of the Commission of 1892 'Who is responsible for and cognizant of the services performed.'

The Auditor General, in his examination on the question of stores, informed the Commissioners that he really audited and took stock of only two public departments. He examines, through his officers, the accounts in connection with the Printing Bureau and also the stores in connection with the government railways, but not the stores of the militia or any other of the departments; and even if he did, while no doubt it might be found that in the great majority of the departments the stores would represent the balances as shown in the different stock books, neither the Auditor General nor his officers could certify as to the quality of the stores detailed in the several stock books or whether the prices for which payment had been made were proper or excessive. Your Commissioners are of opinion that in many instances stores are ordered unnecessarily, and it may be doubtful that a good quality is always delivered. Mr. Pottinger states in his evidence that it is his opinion that the amount paid by the Intercolonial railway for coal was higher than it ought to be. In instances which have been brought to the notice of the Commissioners stores have been received which were not wanted and which it is difficult to get rid of. In fact, at different points stores have been shelved where in all probability they were unnecessary. The Commissioners of 1892 dwelt on this matter and stated that they had had under consideration the question of having a director general of stores or a supply agent to purchase supplies for all services, but they had not had an opportunity of developing the subject. Your Commissioners have come to the conclusion that the time has now arrived when it would be desirable in the public interests that purchasing agents, probably three, should be appointed at good salaries to make all purchases of goods required for the public service, and that all purchases required by the several departments should be procured by this means. In this connection your Commissioners respectfully beg to recommend that inquiry be made as to the working of the Prevention of Corruption Act of the Imperial Parliament passed in 1906 and the bribery clause in connection therewith.

THE OUTSIDE SERVICE.

In the reference to the Commissioners it was laid down that 'While the service at Ottawa should be the first subject for the consideration of the Commissioners, they be authorized and requested to extend their inquiry to any portion of the outside service that may come under their observation and which the time at their disposal may permit them to take into their consideration.'

Acting on this suggestion, as previously stated, your Commissioners visited three places, and they only regret that the time at their disposal prevented them from pursuing their inquiries at other points. The information procured was most interesting and instructive, and even the Chairman, who had spent nearly forty years in the public service at Ottawa, had no idea of what constituted the outside service until he visited the several localities.

As a rule your Commissioners found in the outside service that politics enter into every appointment, and politicians on the spot interest themselves not only in the appointments but in subsequent promotions of officers. While at Ottawa the departments generally are administered with a good consideration for the public interest, yet in the outside service the politics of the party is of greater importance in making appointments and promotions than the public interests of the Dominion. Practically in no

case is it possible to fill a vacancy in one locality by a transfer from another. Each locality is separately guarded, and as the high appointments are all political and the subordinate classes are so graded that it is difficult to get rid of the entanglement caused by multiplication of grades, and, as generally speaking the people who enter the outside service of the several departments are considered as fixed in the several branches in which they have entered, promotion in that part of the service has become almost a nullity. How to get over this troubled state of affairs has become one of the problems to which your Commissioners have given most serious attention.

In the outside service those who have the 'political pull' use it for all it is worth; they pass by their superior officers and bring pressure to procure anything that may prove to their advantage. To get over the difficulties which constantly arise and to circumvent the politicians, the higher officials, being in constant dread of the latter, have evaded the terms of the Civil Service Act by employing officials designated as labourers or examiners or some other title, and have tried to get their several offices into good working order. As a rule the officials in the outside service are without hope, and the majority of them are in dire need. Details thereof brought to the notice of the Commissioners have been pitiful in the extreme. The Commissioners have had printed with the evidence of each department the memorials of officials who have pressed for recognition of claims. The examination of their grievances the Commissioners have not considered to fall within their functions, but they earnestly commend to the chief officers of the several departments at Ottawa the consideration of the memorials attached to the evidence with a view to inquiry and rectification if desirable.

Before leaving this branch of their inquiries your Commissioners have to draw attention to the fact that while in the older provinces of the Dominion the struggle for existence is the lot of the average official, yet in the provinces of Manitoba and British Columbia and in the Northwest provinces the struggle is intensified. With the long hard winters and the high prices charged for fuel, and also in consequence of the increased rentals caused by the great boom which has struck the Northwest, your Commissioners have had reported to them that the lot of the civil servant in that part of Canada is much more pitiable than that of the civil servant in the older provinces; and whatever may be the result of these inquiries, your Commissioners earnestly commend to the attention of the government the condition of employees in Manitoba and the Northwest.

Your Commissioners, before making any general remarks, desire to call attention to circumstances connected with some of the departments.

PRIVY COUNCIL.

In this department your Commissioners have found attached to the staff the Clerk of the Crown in Chancery. To have the officer who issues writs for the elections attached to any one of the departments seems to the Commissioners an anomaly. True, this has been going on for thirty years, but it seems to the Commissioners that the officer in question should be detached from the Privy Council office and attached to the staff of the House of Commons.

AGRICULTURE.

In this department there are many independent branches administered by the minister, such as Experimental Farms, Census and Statistics, &c., &c. The position of the deputy head in regard to these branches seems to be incongruous. He is the deputy of the minister and has to act during the absence of the minister; he is, moreover, a professional man and *ex-officio* Commissioner of Patents, yet in point of emolument he is in an inferior position to the heads of the branches under the jurisdiction of the department. In the event of anything being done in connection with the Department of Agriculture, the Commissioners consider that the position of the deputy head should have attention. The Minister of Agriculture also has under his jurisdiction the

care of the Public Records, and the Commissioners suggest that the valuable historical documents scattered amongst the departments be as quickly as possible transferred to the Dominion Archivist and stored in the new Archives building.

CUSTOMS.

This is one of the three departments whose outside service is recognized by the Civil Service Act. The salaries of officers in the outside service are duly scheduled, but, unlike the other two departments (Inland Revenue and Post Office), no annual increments have been given. The chief positions in the outside service of this department are political appointments. Every collector of customs has been appointed from the ranks of the party in power at the moment. Many of the inspectors are in a similar position, and, under a clause in the Civil Service Act waiving the examination of persons appointed to positions requiring special and technical qualifications, almost all the appraisers in the outside service of this department have been appointed without undergoing the Civil Service Examination. By no chance can an officer of the Customs Department (outside service) be removed from one point to another. If a vacancy occurs in a collectorship at any one point no capable officer can be sent to fill the position from any other point. In the service of this department there are many anomalies and incongruities. In order to avoid the necessity of examinations a new class has been created under the name of 'examining officers,' a class not found in the schedule to the Civil Service Act. In Montreal no officer is graded as 'cashier'; in Toronto there is a cashier. At the last session of parliament the Minister of Customs obtained a grant of $100,000 which has been distributed in amounts of $100 or $150 to officers within the limits of salaries laid down by the Civil Service Act. No officer at the apparent maximum of his class participated in the bounty. The salaries in the outside service seem to have been graded by the amount of revenue received. A first-class collector, say of Montreal or Toronto, receives $4,000 per annum. It would appear that if the revenue was quadrupled no increase of salary could be given. The salaries of the other employees in the Customs seem to have been graded proportionately to the salary of a collectorship.

Curious facts were brought to light in the inquiries into the outside service. At Montreal, for instance, there were found two 'landing waiters,' one appointed in 1871 and the other in 1891, the one doing duty at the Bonaventure Station and the other at the Dalhousie Square Station, both equally good men. The officer appointed in 1871, according to the last Civil Service list, after 36 years of service, obtained a salary of $750. The officer appointed in 1891, with twenty years less service, obtained a salary of $1,000; and when inquiry was made the Collector informed the Commissioners that a most prominent, influential citizen of Canada who could not be refused had been approached by the friends of the officer who was appointed in 1891, and, having inquired into the matter, insisted that his protégé should have an increase in salary.

In Toronto your Commissioners found that the senior officer in point of service who was appointed in 1869 was the fourth in point of seniority. The collector, surveyor and cashier were all his juniors although drawing larger salaries than he receives. There is no question of the integrity and ability of the officer in question. The only suggestion which the Commissioners can make in regard to the outside service of the Customs is to have the department absolutely divorced from political influence, and have all the appointments put upon the basis of merit.

Before leaving this part of the subject the Commissioners beg to call attention to the memorandum from the officers of the Port of Montreal, pages 110 and 111 in the evidence printed with this report, from which it will be seen that the classification of officers of the outside service of the Customs Department involve thirteen grades and in many instances the designations are misnomers, the rank of the officer having no relation to the character of work performed. The officers recommend a different classification and your Commissioners commend it to the consideration of the proper authorities.

INLAND REVENUE.

The Commissioners find that this is another department scheduled, as far as the outside service is concerned, under the Civil Service Act, but unlike the Customs, annual increments are granted to its officers. To some extent, but in a very minute proportion, there has been a removal of officers from some of the districts to other districts. They are few in number, but a precedent having been established the practice might be extended. Of course in the Inland Revenue Department political appointments, as in other branches of the public service, prevail, and as a rule the officers in one district are confined to that one district. In addition to the officers employed in the matters of excise are the inspectors of weights and measures, gas and electricity. Your Commissioners have found that in occasional instances the districts marked out by this department are rather haphazard—the district under an inspector of gas might not cover the same ground as the inspector of electricity. As far as possible your Commissioners recommend that the districts should be made co-terminal. Your Commissioners also recommend to the serious consideration of the department the many memorials and statements submitted by officers who have come before the Commissioners, and especially do they recommend that consideration be paid to the evidence of Dr. Barrett, Inspector at Winnipeg.

POST OFFICE DEPARTMENT.

Your Commissioners find that this is the third of the big departments scheduled under the Civil Service Act. As far as the Commissioners can ascertain the working of this department is conducted in a good businesslike manner, and except for the intervention of politics and, possibly, the desire to run the department too cheaply, no fault can be found with the administration. Your Commissioners consider that the credit for placing this department on a business basis is largely due to the efforts made by the former Postmaster General, Sir William Mulock. He gave deep consideration to the department as a whole, especially to matters relating to the outside service. In every place visited by the Commissioners representations were made by the letter carriers in each district respecting their position. Your Commissioners find that a few years ago the laws regarding the employment of letter carriers were considerably altered. The letter carrier was changed from an official drawing a yearly salary to an official drawing a daily salary, and in cases of absence through sickness or otherwise, deductions of pay were enforced. No doubt in the best interests of the service these laws require to be rigidly enforced. Nothing comes so much into the daily life of the community as the delivery of the mail. It is a service requiring prompt and efficient action. In certain places favouritism is alleged on the part of high officials towards certain letter carriers who were allowed leave of absence with pay, but others of the same class were fined. Your Commissioners do not, however, think this worthy of attention, but they are of opinion that it would be desirable as far as possible to bring the service of letter carriers to an eight-hour a day service. They would also suggest an additional week's leave of absence be allowed this branch of the service, and on consideration they recommend that at least the schedules of salaries laid down by Mr. Ross, Superintendent of Post Offices, should be adopted. Mr. Ross has filed an extensive memorandum which is to be found appended to his evidence.

Your Commissioners were informed at each place they visited and also by delegates from other places, that in almost every post office letter carriers are employed graded as letter carriers but engaged in doing clerical work, and thereby deprived of their uniforms as a consequence. To deprive these men of their uniforms also deprives them of their street car fares. This seems incomprehensible to the Commissioners and they suggest that the officers of the department should inquire into this matter, and that steps should be taken to discontinue the practice in future. Probably there may be a difference in the wage between the minimum of a clerk in the post office and the maximum of a letter carrier so that if the latter were to have his position changed

to that of a clerk he would in the beginning suffer from a decrease of salary. If this be the case, your Commissioners are of opinion that steps should be taken to remove any disability of this character as no one on promotion should suffer pecuniarily. Your Commissioners found that in all the post office branches officials were employed who had failed to pass the examination laid down by the Act, and who were designated as labourers although in many instances doing clerks' work. If the Civil Service Act is to be of effect your Commissioners are of opinion that this incongruous state of affairs should be brought to an end as quickly as possible.

Your Commissioners have now to draw attention to a deserving body of men who carry on their work at great hazard to themselves, namely, the railway mail clerks.

A railway mail clerk suffers many hardships in his daily avocation. He is placed in a car next to the engine. This car has only two sets of wheels. Although the vibration may not be greater than it would be if the car were otherwise placed, yet the ceaseless strain in his daily work tends to the shattering of his nerves and leads to other physical diseases. The Commissioners recommend that the Railway Commissioners be authorized and requested to have plans prepared for proper standard mail cars to be placed on the several lines of railway in Canada. These railway mail clerks work at all seasons. The end of the car next to the engine is a blank wall without outlet, the light is accordingly imperfect from the position of the car, and frequently in the varying seasons the clerks have to take in and remove their mail sacks in blinding snowstorms or pelting rain, often at a considerable distance between the platforms and stations. The approach to the car is as a rule by short perpendicular ladders and generally the mail clerk has to jump on or off at the last moment. It is a service in which accidents frequently happen and it has been shown over and over again in the evidence produced that the health of a railway mail clerk is seriously affected at a comparatively early age and as a rule he has to retire long before he arrives at the age of sixty. But a great defect in the outside service which strikes your Commissioners is the utter inability to give promotion to deserving officials. Once a letter carrier always a letter carrier. Once a railway mail clerk always a railway mail clerk. Your Commissioners have grave doubts whether the present plan of keeping officials constantly in one branch of the service is advantageous, and they would recommend to the department whether a gradual shifting about of the several employees might not prove desirable. But the main fact of a detrimental character in the Post Office service is that promotion is more or less unattainable. Every postmaster is appointed politically and the number of what are called city post offices is small. Hundreds of post offices are used for the benefit of politicians rather than the benefit of the state. Only recently has it been pointed out in the public papers that the postmastership at Kemptville has been vacant for six months, and your Commissioners are of opinion that until the political system in use in the outside service is entirely abolished, notwithstanding all the business methods adopted by the department, efficiency will not follow.

The Commissioners would recommend to the serious attention of the department that now as a free mail delivery is to be extended to what are called accounting offices, whether these offices, of which there must be some hundreds in the Dominion, should not be included in the system of city post offices. At present there are under twenty city post offices. In each post office the appointments are confined to the places where the office is situate. No person, as a rule, in the post office can go outside his own district. Your Commissioners find that this idea of local concentration is not fostered alone for political reasons, but in some cases the local officials have resented the appointment of officers from other places, who have been appointed to positions in other localities on account of their tried service and proved ability. Your Commissioners would recommend to the serious consideration of the Postmaster General whether offices such as Guelph, Woodstock and many others, should not be added when vacancies occur to the jurisdiction of the Post Office Department, and that these offices, together with existing offices, should be divorced from all political pat-

ronage, and by a series of promotions the congestion which is now the apparent curse of the outside service of the Post Office Department might be removed.

Your Commissioners are aware that this is rather in contradiction to the recommendation made by the Commissioners in 1892, but as they are informed that a system of mail delivery is to be carried out in these accounting offices, it would seem to them desirable to bring the whole service in these localities to the same position as Ottawa and other cities.

Your Commissioners cannot conclude their report respecting this department without dwelling upon the pay of the post office inspectors. At the time the last Commission sat inspectors were allowed, when absent on duty, the sum of $3.50 per diem to cover their living expenses. A few years after this the per diem allowance was abolished and only the actual out-of-pocket expenses as certified by the inspector and approved by the department have been allowed. Most of the inspectors have to visit their several districts periodically and they have to go to out-of-the-way places in the Dominion. This is frequently the case, for one of the earliest features of a new settlement is the establishment of a post office, and it is the duty of the inspector to initiate the postmaster. The post office inspectors are called upon to travel in places of the Dominion where the accommodation is indifferent and with much discomfort, especially in winter time. To encourage them to do their work gladly the Commissioners suggest for the consideration of the department that the old per diem allowance be restored as in the judgment of the department might appear reasonable. The Commissioners wish to draw attention to the fact that the classes at the several city post offices receive less pay than the officers of the same grades in the inside service of the department. It seems extraordinary that officials brought in contact with the public and receiving public moneys should draw lesser salaries than the officers engaged in examining their accounts.

RAILWAYS AND CANALS.

Your Commissioners do not propose to make any specific remarks about this department, although it is a great expending department and also has large revenues derived from the government railways. The present Deputy Minister of Railways, who has not been long in office, has established a new system of bookkeeping on the Intercolonial Railway, and it would seem probable that improvements will be effected generally. The Commissioners beg to call attention to the evidence given by the several lockmasters, and would suggest to the department that some method be devised of paying these poor officials at some time before the middle of the month following the pay day. It is very hard for employees who are only paid for six months of the year to wait, especially at the beginning of the season, for a fortnight or more after their first pay becomes due. Your Commissioners have not visited this department, believing that other departments required more immediate inspection.

INTERIOR.

The same remark to a certain extent applies to the Department of the Interior. With its large staff of 500 employees at Ottawa, it would require months to thoroughly inspect the work and see that the several officials are properly employed.

The Commissioners regret extremely that with the short time at their disposal they were unable to visit the Northwest, much as they desired to see how the land, and more especially, the timber sales are effected.

MARINE AND FISHERIES.

This is one of the three departments in which expenditures have considerably increased. In this department two of the Commissioners, Messrs. Fyshe and Bazin, have spent considerable time, and the following report is theirs:—

Your Commissioners have spent a large amount of time in trying to get an insight into the general administration of the government business, as shown in the management of this department. They found that, to make any efficient inspection was a matter of enormous difficulty, owing to the system in vogue of distributing all the correspondence of the department in files according to their subjects—a new file being started as every new matter comes up; and sometimes a separate file for each branch or section of a subject. There are now in existence nearly 30,000 of these files.

This system seems to have been adopted partly to meet occasional demands from the members of the House of Commons for complete files of letters connected with some matter which the House was inquiring into. When such a demand is now made the requisite file of letters can be produced at once. The system is also a convenience to the officer conducting the correspondence, since it enables him with the least possible trouble to see the whole previous history of the matter being dealt with. But if it has these advantages they are much more than counterbalanced by greater disadvantages. There can never be a certainty, in looking over a file, that all letters which have been written in connection with the subject are before you; and letters may be practically lost, at least temporarily, by being placed on the wrong file when there is no file number marked on them. A much greater objection, however, is that by this system anything in the shape of an efficient inspection of the department becomes all but impossible. To overhaul the management of even one of the agencies of the department from the head office might mean the necessity of wading through hundreds or even thousands of files.

If there is ever to be any adequate provision made for the periodical inspection of this department, or others like it, which your Commissioners think is an absolutely necessary addition required for the machinery of administration, it will be necessary to have some changes made in this respect, to the extent at least of having all the letters to and from the different agencies consecutively numbered, and filed in chronologcial order. If it be deemed absolutely necessary to continue the present system of filing, on account of the requirements of parliament, it can easily be done by using copies only.

Your Commissioners have taken up, and at great labour have followed through some of the files in this department, making extracts as they went along, which have been rewritten, as nearly as possible in chronologcial order, and which are now available and can be examined if required. The judgments they have formed are based largely on those extracts and on what they have seen in the offices.

These files have reference to the repairs of the *Anticosti* lightship, with some of her previous history; to challenged accounts; to the proceedings of the Lighthouse Board; to contracts of various kinds, principally in connection with the building of lighthouses in re-enforced concrete; and to the new types of buoys and beacons recently adopted by the department.

The department is practically swamped with correspondence, 100 to 120 letters a day being about an average. Each letter has to be put on the file to which it has relation, and that means a day's work of the records staff of the department, which consists of six officers. Next morning the files are distributed among the different officials for the new letters to be answered. This means the enforced delay of at least one day, which might often be serious in the case of important business. When answers are prepared to the letters they are presented for signature to the Deputy Minister, who is assumed to know all about them, but which is practically impossible. In not a few cases letters are written, signed by the deputy and despatched, notwithstanding that they may be in conflict with previous correspondence or instructions on the same subject, and therefore calculated to bring reproach and discredit on the department.

No effort seems ever to have been made with a view to cutting down this enormous

mass of correspondence, a large amount of which with better organization could in our opinion be done away with and the rest of it more effectively handled.

There are officers enough in the department, both inside and outside, to do all the work efficiently, if they were properly trained and organized; but there is no efficient organization. The only attempt at it is the appointment of men whose titles would seem to indicate what their duties are; but those duties have never been specifically defined. There is no record of anything of the kind, and there are no written or printed rules and regulations known in the service, which your Commissioners think is lamentable.

It is practically impossible to fix responsibility on anybody. The deputy is supposed to shoulder responsibility for everything as his signature shows; but that means that he speaks for 'the department,' and 'the department,' like the King, can do no wrong. There seems to be a huge redundancy of work which proceeds in a lumbering, haphazard way, giving rise to constant blundering and confusion. There is no sign visible of a single directing head, or an intelligent purpose, unless it be that of spending as much money as possible. Zeal for economy and good management, or pride in the work, is not visible. Perfunctory and mechanical discharge of duties is the rule, with apparently no perception of any need for improvement.

The lack of organization and of organizing power in the department has recently been very conspicuously and painfully illustrated by the fact that the Accountant's or Bookkeeping branch had apparently fallen into such confusion that expert accountants had to be called in to put things to rights, and create some intelligible system. After months of work by these highly paid experts the result has been at least greatly improved books as far as mechanical form is concerned, but probably little else; and this achievement has been accomplished at an almost fabulous expence.

There is not only a lack of efficient organization and method in the department. There would also seem to be a lack of conscience. In connection with the enormous expenditures which are deemed necessary, the word 'discount' never appears. It is tacitly assumed that there is no such thing; but the whole commercial world knows otherwise. If no one gets any benefit from trade with the government except the trader, then it must be clear that in these great purchases made for the government, without discount, its officers must be assisting the trader to get better prices from the government than he can get anywhere else; for, everywhere else he has to give discount. In other words, some of the government's officers are serving two masters, and apparently succeeding with both—scripture notwithstanding.

It seems amazing that this question has never been courageously faced and dealt with. There is evidently a power in the hands of responsible officers of some of the departments which they can exercise without the necessity of giving any account of it, and with the most demoralizing consequences all round. It is certain that under such a state of things it must be impossible to develop high character in the service, or rather to prevent the deterioration of what character there is.

The extracts from the 'Challenged Accounts' file show constant inquiries from the Auditor General as to prices, but there is always some more or less unsatisfactory explanation, ending with whatever certificate may be necessary, and further investigation is baulked.

A list of prices paid in Quebec was, in February last, submitted to the manager of the shipyard at Sorel, for comparison with the prices which he was paying there; and in his reply he stated that the prices generally were about 50 per cent higher than the prices being paid at Sorel. One item objected to was the purchase of a certain brand of flour at $6.95 a barrel. When this was inquired into at the instance of the Auditor General the agent replied: 'These are ——'s prices, and the same prices are charged by every flour dealer in Quebec for the same brand of flour. These brands cannot be bought for less here. If as good flour can be bought in Halifax for $5.20 per barrel it would pay the department to import it from there. There are other

brands of flour that can be bought in this market from —— and others at $6 upwards, but not less than $6, suitable for our purposes. Our people generally choose the best, for the reason that it is subject to changes of temperature which might cause it to harden or sour, as has often occurred with ordinary flour.' And he adds later on: 'Referring to the matter of flour, there is but one flour dealer on the patronage list. I beg respectfully to suggest that you place one or two more on the list of such dealers.'

Your Commissioners took the trouble to inquire of the makers of the particular brand of flour in question what price they were selling it at in Quebec at the time of the purchase referred to and were informed that the price was $4.50 per barrel, at which price they would only have been too glad to sell to the department. It should hardly be necessary to make any comment on this.

Your Commissioners are informed on the best of authority that this state of things has been going on ever since pre-Confederation times. As some evidence that the heads of the department have been quite aware of it, we find on one of the files a memorandum by one of the officers dated 31st May, 1905, regarding expenditures in connection with lighthouses. 'I am of opinion that in the Quebec Agency alone a saving of at least $25,000 per annum can be made by compelling the agent to obtain authority for his expenditures over ordinary supplies and maintenance. If this is not carried out, the department can look for an overdraft for the next fiscal year of from $50,000 to $100,000.'

The cure suggested is too ludicrous to be taken seriously, but, as evidence of the condition of things, and the department's knowledge of it, this memorandum is significant. It was marked approved and initialled by the minister at that time.

In another memorandum dated 5th March, 1906, we find the following: 'The maintenance stock is fairly large, although nearly everything is also purchased in retail. The only improvement I could suggest would be to appoint a storekeeper, and not let anything go out of the store unless a requisition is signed by the agent. I may also add that if you had a good storekeeper, articles which are often required could be purchased wholesale instead of retail, and thus a considerable saving could be effected—a saving of $8,000 or $10,000 a year could be made. I think it would also be advantageous to have the shops better equipped so as to be able to make repairs to machinery of the steamers, &c. Now, we have to go to——or some one else for every little repair. From 1st July to this date we have already paid $59,131.66 to —— alone for repairs of all kinds, and we still have four months to run to the end of the fiscal year.'

Another curious memorandum appears on file, dated September last. It is in reference to a letter from a contractor at Prescott complaining that his contract to supply anthracite coal for the depot there, for one or three years, involved a loss to him of 50 cents a ton. Contract price was $5.75 and cost price $6.25, and he begs for consideration. 'I am willing,' he says, 'to continue the furnishing of the coal, under the circumstances, at cost price.' The memorandum is as follows: 'I recommend that the contractor's offer be accepted; and as he has furnished coal at a loss in the past, that 5 per cent profit be allowed him for coal in future. Anthracite coal in Ottawa costs from $7.25 to $7.75 and the regular price at Prescott is $7 per ton.' This was agreed to.

These are comparatively small matters, but they are not small in the aggregate; and they are not small as symptoms of the disease the department is suffering from.

A great part of your Commissioners' time has been given to the files connected with the buoy service, which is one of the most important branches of the department. About three years ago the department took a new, and apparently vigorous, departure, in the effort to supply new and improved aids to navigation. This work, which had been under the charge of the Chief Engineer, was divided up, and a Lighthouse Board was established, apparently with the idea of effecting better results by making a specialty of this branch of the department. A new officer was appointed in connection

with it called the Commissioner of Lights, whose whole time is now given to its management, which includes the management of a lighthouse depot established at Prescott, where a great variety of work is carried on connected with the lighthouse and buoy service. Your Commissioners have to report that in their opinion this new departure has been a most unfortunate one so far as the efficiency of the special work is concerned ; and it certainly has not added to the general efficiency of the Marine and Fisheries Department.

The Lighthouse Board consists of six members:

Lt.-Col. F. Gourdeau, Deputy, Marine and Fisheries Department, chairman.

Lt.-Col. W. P. Anderson, Chief Engineer, Marine and Fisheries Department.

Commander O. G. V. Spain, Marine and Fisheries Department.

J. F. Fraser, Commissioner of Lights, Marine and Fisheries Department.

Hugh A. Allan, Montreal, Allan Line of Steamships.

Capt. J. W. Troupe, Victoria, B.C., Manager Canadian Pacific Railway Steamship Lines in British Columbia.

Four of these gentlemen are the senior officers of the Marine and Fisheries Department, while the other two represent the shipping interests. This Board seems to have no duties but the giving of their decision upon all applications for new or improved aids to navigation coming to them from all parts of the country, from the Straits of Belle Isle and Newfoundland in the East to British Columbia in the West. Whatever importance their decisions may have (and they mean much when expressed in dollars) it does not concern them. Figuring as an impartial and skilled tribunal, passing upon all demands for government money under the plea of necessary aids to navigation, they can do so without the slightest sense of responsibility, for they absolutely incur none. The responsibility for all consequences is immediately assumed by the Marine and Fisheries Department, although the head of that department is not a member of the Lighthouse Board and personally cannot be considered responsible for them.

Between June, 1905, and June, 1907, this Board approved of and passed applications for new and improved aids to navigation amounting to $1,691,813. With the voting away of this vast amount of money the responsible minister had nothing to do. He was simply asked to initial the minutes of the different meetings of this most powerful but irresponsible board. The effect of this state of things is disastrous. It means practically the removing of all responsibility from those to whom extensive powers of administration and expenditure are granted.

When one realizes the enormous pressure being constantly brought to bear on the government of the day in favour of grants and bounties of all kinds, from one end of the country to the other, it would surely seem to be a most unwise thing to create a board with extensive powers, which can be and are used in sympathy with this universal outside pressure, and without being accountable to anybody.

The two outside members of this board simply represent the shipping interest, which is their own. They cannot serve the country and themselves equally well in the same matter. The other members of the board are government officials, who, whatever their standing may be, personally or officially, are not independent of political influence or departmental pressure. They are in no proper sense qualified to fill such a position of trust as a seat on this Lighthouse Board should mean—where the most absolute sense of justice, with complete independence, is called for; with a keen desire to administer the people's money with the utmost economy and good judgment, and with all personal considerations sunk.

If the board is intended to be a permanent institution it should be reorganized; and the Minister of Marine and Fisheries should be a member of it, as being chiefly responsible for the finding of its expenditures.

There can be very little question that the Lighthouse Board has been the means of greatly increasing the expenditure of the department, and that much of the increase has been wasted.

Your Commissioners regret that they have been unable to investigate the condition of things in some of the other departments. But to do the work with any pretensions to thoroughness would take much more time than would probably be agreeable to the government. They have been able to go over only a very small section of even the Marine and Fisheries Department. If they had had time it would have been most desirable to have inspected the work of the department at the agencies—Quebec, Sorel, Halifax, St. John and Prescott—particularly Quebec and Halifax.

But from what they have seen they are fully convinced that some system of continuous inspection, either under the Auditor General's Office, or under an independent and permanent Civil Service Board, is absolutely necessary to create, or to maintain when created, a civil service worthy of the country, and fully equal to the duties required of it. No private corporation of even half the magnitude of some of the government departments could be carried on successfully without such a system of inspection.

Your Commissioners have to confess that the general conclusions which they have formed regarding the administration of the department are most unfavourable. It seems to have few redeeming features: although there are some, one of which is the presence in the department of some good men, chiefly, but not wholly, in the lower ranks. With a better organization and better methods these might form the nucleus of a good staff. The trouble is not of recent origin but has been long continued and is the result of evil methods and practices persisted in for many years. Organization, discipline, zeal for the public service, and regard for economy are all conspicuous by their absence. Money is wasted in small things as in great because no one seems to have any motive to do otherwise. While there is no real punishment for the most outrageous blundering or the most incompetent service, there is at the same time absolutely no means for the discovery of merit and the promotion of talent. It seems to have been the same under all administrations, and government departments, like private corporations and private individuals, having once acquired a distinctive character find it impossible to change it by any impulse from within.

The political pull has much to do with this; and no radical improvement need ever be expected until the political pull is completely eliminated from all branches of the service.

The question of salaries is of course the main one with the employees, but the question of quality and value of service requires just as much consideration from the other side. It is true that the salaries of most of the civil servants are not equal to what they were thirty or forty years ago, in consequence of the greatly increased cost of living, the obvious and logical result of our wasting, impoverishing and demoralizing system of protection. As there is no prospect, however, of much relief from our self-imposed burdens taken up in our endeavours to improve on nature, the least we can do is to try and redress the injury which has been wrought to the fixed salary class, prominent among whom are the civil service employees. That it is our clear duty to do. The chief sufferers have been the lowest paid officers, and they should have the largest proportionate increase.

N.B.—Messrs. Courtney and Bazin, while of opinion that the increased cost of living is largely due to the fiscal policy in force in the Dominion, consider that the descriptive remarks respecting protection are unnecessary for the purposes of this report.

MILITIA AND DEFENCE.

The expenditure in this department is going up by leaps and bounds. In 1903-4 the total expenditure, both in capital and consolidated fund, was in the neighbourhood of three and a half million dollars. In the estimates lately submitted to parliament for the fiscal year ending March 31, 1909, appropriations are asked for aggre-

gating $6,500,000. That is to say, in four years and three-quarters the expenditures will have increased, if the supply asked for is granted, to the extent of three million dollars. Your Commissioners have made a comparison between these two years for specific reasons. In 1904 there was introduced into parliament an Act respecting the Militia and Defence of Canada, which in many particulars was a new departure from the former Act. In the Act of 1904 by section 6 it is enacted:—

'The Governor in Council may appoint a deputy of the minister and such other officers as are necessary for carrying on the business of the department, all of whom shall hold office during pleasure'

In all the Act, which has over 140 sections, no other reference is made to the deputy, and it is a curious circumstance that while certain officials have their appointments permissive, yet in certain others they are mandatory: as, for example, it is stated in the revised Act, section 30, that 'there *may* be appointed an officer to be charged with military inspection of the militia.' Section 32 states 'there *shall* be an adjutant general. Section 33 'there *shall* be a quartermaster general; section 34 'there *may* be a master general of ordnance'; and in section 36 it is stated: 'In and for each militia district there *shall* be appointed by the Governor in Council an officer called the district officer commanding.'

Your Commissioners cannot explain the seeming difference in the appointments of these officers, but leaving that aside they have to draw attention to the fact that by section 7 of the Act it is enacted that—

'The Governor in Council may appoint a Militia Council to advise the Minister on all matters relating to the militia which are referred to the Council by the Minister * * * * * '

That is to say, apparently the powers of the Council will only refer to matters in which the Minister of Militia requires advice. Be that as it may, very shortly after the Act was assented to the Militia Council came into existence and two reports have been made before parliament from that body for the honourable the Minister of Militia and Defence. In each of the reports, in the presentation to your Excellency, it is stated that in presenting the report of the Militia Council for the specific year 'such report being that of the Department of Militia and Defence, &c.' It follows, therefore, that the Militia Council have the full control of the department; that it is in effect *the* department; and in presenting the report the department as an entity is swallowed up by the Council. In the first report of the Militia Council, that for the year ended December 31, 1905, in the fourth paragraph it is stated that 'An important question under the present system of administration is the control of expenditures. With the institution of the higher commands, held by officers having larger powers of administration, the question of financial decentralization is receiving careful consideration. If adopted, the powers to be given of authorizing expenditure of public funds will be clearly defined by explicit regulations both as to details and extent.'

It follows, therefore, that the control of expenditure is in a great measure the business of the Militia Council, and in gauging the efficiency of the department attention should be given to the composition and powers of the Council. The Council is modelled on the Army Council of Great Britain which was created as a result of the outcome of inquiries into the army by the Esher Commission. The Army Council of the mother country is made up of the Secretary of State for War, who presides; the Chief of the General Staff, the Adjutant General, the Quartermaster General, the Master General of Ordnance, the Political Under Secretary of State for War, the Financial Secretary of War, also a member of the administration, Mr. Buchanan, M.P. It will be seen, therefore, that the Army Council of Great Britain is made up of the professional together with the political element of the War Office; that the War Office is kept entirely distinct; and the only connection between the War Office and

the Army Council is that the permanent Under Secretary of State for War is the secretary of the Army Council—much the same as the Deputy Minister of Finance in Canada is the secretary of the Treasury Board—but the functions and duties of the War Office are kept entirely apart from the Army Council. The control, especially of expenditures, is under the purview of the Director General of Finance in the War Office. As has been pointed out in dwelling on the difference between the Public Accounts Committee of Canada and the same committee in Great Britain, one of the three reports of the committee in Great Britain deals entirely with the War Office, and the committee were very severe in their report as to the method of keeping accounts, going so far as to say that if the views held by the War Office were prevalent throughout, no system of accounting would be of any value.

In Canada the Militia Council is made up of seven members—the Minister of Militia and Defence, four military members bearing the titles of Chief of the General Staff, Adjutant General, Quartermaster General and Master General of Ordnance; the titles also borne by the professional members of the Army Council in Great Britain—but the other two members of the Canadian Militia Council are the deputy head of the department and the accountant. That is to say, the Militia Council in Canada differs from the Army Council in Great Britain in that the department is swallowed up in the one and entirely distinct in the other.

Your Commissioners have to call attention to the evidence of Colonel Fiset and Major-General Lake. It will be seen from it that the members of the Militia Council have officers to assist them in the performance of their duties bearing the titles of Directors, being the same title as is given to the assistants of the Army Council in Great Britain. The headquarters staff in Canada numbers about forty. In addition to the Council an officer has been appointed, called the Inspector General, at a salary of $6,000 per annum. In Great Britain the appointment of Inspector General was made for reasons which do not exist in Canada; but as the Inspector General in Canada has only to report, your Commissioners are very doubtful, however valuable the reports may be, that the retention of an officer at such a large salary is beneficial and altogether in the public interests. From past experience, it would seem as if this office were being made a stepping stone to the retirement of high military officers in Canada on large allowances. The Inspector General is unlike the Auditor General, in that he has only to report; he has no powers of dismissal or control, and while the Commissioners have very great respect for the present able official who occupies that position, they are of opinion that when the office becomes vacant it need no longer be filled up. While on this subject, your Commissioners have to point out that throughout the entire public service of Canada there are but few officials who rejoice in a salary over $4,000 per annum, or even, with the exception of deputies, are in receipt of that much. In fact your Commissioners can only recall at the moment the Deputy Minister of Justice, who receives $6,000; the Deputy Minister of Railways and Canals, who is in receipt of $7,500, and the General Superintendent of the Intercolonial Railway, who receives $6,000 per annum; also, possibly, the General Superintendent of Experimental Farms, who receives $4,000 and a house. Yet in the service of the Department of Militia and Defence there are two officers receiving $6,000 per annum, three members of the Militia Council receiving $4,000 and an officer in one of the commands receiving $5,200, besides other officers receiving salaries and allowances far beyond the average official. In fact, for the service performed, the Militia Department awards to its officers pay vastly higher in proportion than any other of the departments under the Crown. Since the formation of the Militia Council several adjuncts to the militia service have been created. This will be seen by reference to the evidence of Major General Lake. Your Commissioners are not prepared to say whether the Ordnance Store Corps, or the Army Service Corps, or other corps are necessary, but one particular corps your Commissioners regard as unnecessary and undesirable. Your Commissioners refer to the staff of paymasters. In the evidence

before the Commissioners of 1892, the then General Officer Commanding, Major General Herbert, was asked this question: 'As respects paymasters in the district staffs mentioned a moment ago?' Answer—'I confess I do not see the object of having district paymasters in these days when the transmission of money can be made so easily by means of a cheque. I see no reason why a cheque should not be sent directly from the deputy minister to the person who requires it without the intermediary of a third person.' In consequence of this evidence the old system of paymasters was abolished, but again, with all its defects, the system is being re-introduced. The Auditor General in his evidence shows the evil effects of this system. Large sums are sent to the district paymaster, portions of these sums are sent to the sub-paymasters, until at one time as much as $60,000, according to the Auditor General, was held by the paymaster at Halifax. The expenditure disbursed by the paymasters is scarcely more than a third of the total expenditure of the department. The reason given by Major General Lake for the re-introduction of the system of paymasters was that he could not see how an army in the *field* could get on without paymasters. This seems to your Commissioners to carry to the extreme the principle of being prepared for war in time of peace. The reason given by the deputy head of the department is that it saves trouble, and frequently before the system of paymasters was introduced two or three hundred cheques were sometimes issued from the department in a day. But if the Intercolonial Railway, with its 9,000 employees, can manage their payments by cheques, and the Post Office Department, with 11,000 odd postmasters, can do the same, it does seem to the Commissioners that with its limited payments and comparatively small number of persons dealt with by the paymasters, the necessity of creating this corps is not apparent.

Your Commissioners made a computation of the number of officers employed at headquarters and with the officers of the permanent corps they number over 200. The number of men in the permanent corps is somewhere under 3,000. In the first Militia Council report to the 31st December, 1905, it is stated that the strength of the permanent corps on the 31st December, 1904, was 959, and on the 31st December, 1905, 2,058, or just 1,100 more. It would follow that the average strength of the permanent corps in 1905 was 1,509, and by the report of the Militia Council the number of desertions was 492 during that time, or just about one in three. In the second report of the Militia Council for the year closing June 30, 1906, it was shown that on the 30th June, 1906, the strength of the permanent corps was 2,267, the average strength during that time was 2,160. The desertions in that six months were 348, or somewhere about one in six. Your Commissioners have not seen any report since the 30th June, 1906, and are unable to give subsequent figures, but taking these figures from the official reports it would show a very grave state of affairs with such a large number of desertions from the corps. Your Commissioners can hardly think that the average Canadian, who presumably has as great a sense of regard for the oath of allegiance as the soldier of any other part of the empire, would willingly desert unless for grave reasons, and your Commissioners have come to the conclusion that the large percentage of desertions is to a great extent caused by the want of sympathy between the officers of the permanent corps and the men. It would seem that to a certain extent resentment is shown by the men on account of this want of sympathy by the officers in the daily lives of those under their command.

Your Commissioners have referred to the high rates of pay enjoyed by the officers in the service of this department. This is no doubt a cause of grave dissatisfaction to the members of the other departments in the public service, who, while occupied with grave questions relating to the government of the country, with their time fully occupied in the earnest pursuit of their duties, see in a favoured department people paid much better than themselves and working no harder, even if as hard, and in work of less paramount importance. The accountant of the Militia Department, who has an expenditure of six million dollars a year confined to a few appropriations, is much more highly paid than any of the accountants of the other departments. The account-

ant of the Railway Department has to adjust accounts relating to a revenue of six or seven millions and has also to do the bookkeeping in connection with the expenditure of eighteen millions a year. The accountant of the Public Works has under his control accounts connected with appropriations totalling ten millions a year, and numbering some hundreds. The accountants of the Finance Department, gathering up the details from all the other departments, have under their examination a daily turn over in cash of one million dollars a day, and the accountants of the Audit Office have under examination the expenditure of all the other departments. None of these accountants are so highly paid or so highly placed as the accountant of the Militia and Defence, and the result causes grave dissatisfaction. It is stated that the accountant of the Militia Department is the adviser, financially, of the minister; so also are all other accountants in the departments, and it would scarcely follow that the accountant in a department controlling however great an expenditure should be in a better position than those who are doing more arduous work. Conjointly with the title of Accountant of Militia is the title of Paymaster General, an outcome of the system of creating a corps of paymasters. This is an entirely misleading title. There is a member of the administration in Great Britain called the Paymaster General, a part of the political system there, but whose duties lie in connection with all departments. And not only is the title misleading, but when the initials only of the title are used it leads to confusion with a member of the government, the Honourable the Postmaster General. For the accountant of this department to be named the Paymaster General is incorrect, as he can only be the paymaster of matters in connection with militia expenditure. The misuse of names is not confined to the titles of officers, but is characteristic also of the Militia Council whose minutes are promulgated as minutes of the Minister of Militia in Council. Canadians have got into the way of appreciating the term "Your Excellency in Council," but in connection with the Militia Council it is hardly suitable to the case and throughout the Dominion is liable to be misunderstood.

Not only is this system of payment to the higher officials of the Militia Department beyond the ordinary, but it is a cause of great dissatisfaction even amongst themselves. The Deputy Head, Colonel Fiset, whose frank and manly evidence the Commissioners feel called upon to notice, stated very naturally in his memorandum that, compared with the other members of the Council, his salary of $3,500 per annum was not what he ought to be paid; and the accountant of the department, who is also a member of the Council, is not paid at the same rate as the ordinary members of the Council, which shows, therefore, that when once an unequal system of high payment comes into existence it causes dissatisfaction in the department as well as in the other departments.

Your Commissioners have noticed that it has been held to be of serious importance that the expenditure of the militia in Canada should increase with the growth of the revenue, and that when once the revenue has arrived at a hundred millions a year the expenditure should be in the same proportion to thirteen millions as thirteen millions is to one million, that rate being paid for conditions at the time of Confederation. It would follow, therefore, that with a revenue of $100,000,000 a year the expenditure should be at the rate of eight millions. How this can be adjusted with the various retardations which must occasionally happen through a bad harvest, stringency of the money market and other causes, the Commissioners cannot understand. It would seem that the militia expenditure would have to be cut down in proportion to the revenues. The better method, in the opinion of the Commissioners, is that the expenditures should be increased according to the growth of the population and be put on a per capita basis. In conclusion, your Commissioners have to point out that the expenditure has grown in a little over four years from three and a half millions to six and a half millions; that the Permanent and Headquarters Staff have increased to the number of about 220; that in addition to the general system

of high pay the favoured men of the militia service in Canada draw pensions not only for themselves but for their wives and children; that the staff is sufficient for a corps of one hundred thousand men, according to the evidence submitted; that the permanent corps are under three thousand men; that the desertions have been one in three; that the number of militia trained in the annual camps is about 40,000 men; that according to the evidence of Major General Lake the men attached to the rural battalions have no drill except at the annual camps, and it is arguable whether the city corps are as efficient as they were some years ago; that while only 40,000 men come out for drill of ages from 18 to 50, yet compared with the population of over a million men in Canada between the ages of 20 and 40 the proportion seems small. Whether with all the large expenditure of public moneys the result as detailed shows efficiency, your Commissioners leave to the consideration of Your Excellency. Your Commissioners have not gone deeply into the question of stores purchased for the militia service, as there is no means by which they could appreciate whether the amounts payable for sub-target guns or for Ross rifles are proper and just, but according to the evidence the contract for the Ross rifle was prepared by the counsel employed by the company, and no security was exacted.

If with all the consideration of the Public Accounts Committee and the War Office, the expenditure in Great Britain is such that the Public Accounts Committee consider it their duty to draw attention to expensive ideas, particularly amongst military men, and that grave irregularities are punished by reprimand, the system in Canada where the control is not as effective as in the motherland would seem to be more disadvantageous to the Dominion. While the Commissioners have felt bound to point out what they consider the several defects in the Militia Department, they are constrained to report that in some cases the officers employed by that department are men of high character and fully alive to their responsibilities.

PUBLIC WORKS.

This department has largely increased its expenditure during the last few years, although a large expenditure, that of the ship channel, has been transferred from the Public Works Department to the control of the Department of Marine and Fisheries. The expenditure of the Public Works Department in 1903-4 was, in round numbers, $5,000,000; and this is to be increased during the coming year, according to the estimates recently brought down, to about $11,250,000. In looking over the system adopted in this department it will be found that with the exception of a very few instances all the officials both at Ottawa and in the outside are not under the Civil Service Act. In Ottawa alone hundreds of labourers are employed and in the outside service there are engineers, architects, clerks of works, foremen and outside labourers to a very large number.

In certain cases there may be overpayments of wages such as the notorious instance which was brought to light about a year ago, when a clerk of works appointed by political influence was found to have sublet his work to another person at a much lower rate. Your Commissioners consider that some steps should be taken to organize the large army of employees in connection with this department, many of whom have served their entire lifetime in its employ, and bring them under the definite regulations so that their employment may be considered fixed and stable. Your Commissioners desire to point out that in this department the services of officials are often charged to several different votes. Your Commissioners are of opinion that in all cases the salaries of officials should be charged against one appropriation only; and that no allowances for extra services should be paid unless a sum for the purpose has been voted by parliament, not in a general clause merely, but individually and by name. This remark should be of general application to all departments. In all such cases parliament should be fully advised of the circumstances.

Your Commissioners are led to believe that in many cases works have been undertaken by the Department of Public Works at the instance of municipalities or bodies of people locally interested, in which the opinion of the outside officers of the department as to the desirability of the proposed works was not asked for. The only information sought for related to the feasibility of the works in question. The Commissioners of 1892 drew attention to the practice of building customs houses, &c., in small towns. With regard to this the Deputy Postmaster General at that time stated that not only did it tend to increase the charge to the department, for the reason that by moving to a public building the postmaster had to give up his own business, but in other ways by the employment of caretakers, &c., &c., it largely added to the cost of the service. Your Commissioners think it desirable again to bring under notice the observations made in 1892.

SECRETARY OF STATE.

Your Commissioners desire to call attention to the memorial submitted by the Under-Secretary of State in connection with the records relating to the external affairs of the Dominion, and submit that the time has come when regulations regarding such records should be promulgated.

Before proceeding to the matter of recommendations your Commissioners desire to point out a few matters which have come to their attention during the progress of their investigation which would seem to be worthy of attention.

Your Commissioners in dealing with the Inspectors of the Post Office Department, suggested that a system of per diem allowances should be reverted to. They wish to amplify the remarks in that connection, and before proceeding to other matters, they would recommend that a system of per diem allowances to public officials engaged in travelling on public business be instituted under regulations to be laid down by the Treasury Board at such rates as would accord with the position of the officials and the nature of the business to be performed.

In the preparation of the blue-books presented to parliament there seems to be a certain amount of overlapping and duplication. It is difficult, for instance, to know in what respect the blue books emanating from the Customs and Trade and Commerce Departments differ. The gist of the blue books is finally put together by the Director of Census and Statistics in the Statistical Year-Book of Canada, and it would seem to the Commissioners desirable to ascertain whether the blue books issued by the several departments could not be reviewed by some authoritative body with a view to their simplification and co-ordination, thereby increasing their value without increasing their cost. Your Commissioners believe that this might be done by, possibly, a joint committee of the two Houses of parliament entrusted with the printing of parliamentary documents.

In the next place your Commissioners notice that several departments are engaged in the matter of inspections in connection with the trade of the Dominion. The Department of Inland Revenue besides the adulteration of food is charged with the inspection of weights and measures, gas and electricity. The Department of Trade and Commerce is charged with the inspection of grain, hides, pot and pearl ash and the administration of the system of bounties. The Department of Agriculture is entrusted with the inspection of fruits, canned goods, &c. Your Commissioners consider that it would be a matter of economy and would lead to simplification if all these inspections were grouped together in one department under one responsible minister somewhat similar to the system adopted by the Board of Trade in Great Britain.

Another matter which at the present time is deserving of serious consideration is the matter relating to the public health of the Dominion. There seems to be a division of authority between the Dominion and the local governments on this question. The Dominion would undoubtedly have under its control the question of quarantine, and

the local governments have under their control matters relating to the public health in their several provinces, and jurisdiction over hospitals, &c. But still large questions of public health are dealt with by the Dominion Government. The Department of Inland Revenue is charged with the matter of analysis of food ; there is a Director of Health under the control of the Department of Agriculture, whose duties consist of the control of quarantine, the health of labourers employed in public works, &c. The quarantine is performed at places at some little distance from the ports to which the ships are sailing. When a ship with immigrants arrives at its port after quarantine further medical inspection takes place under the control of the Department of the Interior by medical men duly appointed for that purpose. The work performed by these men is always more or less under pressure. Dr. Pagé stated that at Quebec during the last season he had to pass some 5,000 immigrants in a day. Even after this, immigrants leaving Quebec, before reaching their several destinations, are placed under medical examination by other medical officers who board the trains in transit. Another medical officer, having the chief control of immigration, has also under the Department of Indian Affairs, the inspection of the health of the Indian community ; and the Marine Department has the charge of sick mariners and marine hospitals. Your Commissioners consider it desirable that, in view of the attention paid by the public in these days to the prevention of consumption and the formation of anti-tuberculosis hospitals throughout the Dominion, all these health officers should be brought under the control of one minister in one department, and possibly in addition thereto a national laboratory be established. Your Commissioners beg to point out the evidence of Dr. Montizambert and Dr. Pagé on this subject. If this suggestion is received with favour your Commissioners would consider it desirable that under this Department of Public Health the medical examination of candidates for entrance to the Civil Service should be conducted, and also the medical examination of officials applying for leave of absence on account of ill health. As has been pointed out in a previous part of the report no doubt many men under a daily wage suffer from their inability to employ a doctor to look after them on account of having to lose their pay for each day of absence.

Another important matter which is worthy of consideration is the preparation of maps required by the several departments of the Dominion Government. Under the system at present in vogue maps are prepared by the Departments of Railways and Canals, Marine and Fisheries, Public Works, Militia and Defence, Post Office, Geological Survey and the Department of the Interior. Much praise has been given to an Atlas of the Dominion lately prepared by the Geographer of the Department of the Interior. Your Commissioners would suggest whether it is not possible to group the several officials engaged in this one object under one department and one responsible minister.

Your Commissioners have now finally to bring to the consideration of Your Excellency in Council the conclusions at which they have arrived. It has been pointed out that as far as salaries are concerned the higher officials, such as deputy heads, are underpaid in proportion to the emoluments derived by persons in outside avocations. Your Commissioners have pointed out what they consider should be the normal salary of a deputy head, but even in the case of deputy heads, although it can scarcely be said that no one department is unimportant, yet there are degrees of importance amongst the departments; and while the salary mentioned should be, in the opinion of the Commissioners, the normal salary, yet in special cases the Commissioners consider special emoluments should be given.

Coming to the question of classification your Commissioners have already pointed out that the classification at present existing is mostly disregarded. Officials are made chief clerks from length of service without change of duties. In some departments the number of chief clerks is much in excess in comparison with other departments. In the opinion of your Commissioners there should be, below the deputy heads, a rank of officers having special and technical qualifications, such as the officers of the Experi-

mental Farms, engineers, architects, &c. Below these there should be a chief for each branch as Accountant, Chief of Correspondence, Contracts, Engineering, &c., or any other important special work. Below these there should only be the rank and file of clerks without any special name unless it be the Writer Class.

In the matter of pay and promotion, every officer in the service should be treated on his merits. When a young man of great efficiency, who gives indication of force of character, appears it is surely to the advantage of the country that it should get the full benefit of his capacity as soon as possible. To secure this he should have swift promotion instead of having obstacles thrown in his course by narrow official regulations and limitations. Each technical or special officer or agent should have his duties clearly defined and he should be held to a strict responsibility for their efficient performance. Letters connected with his special work should be answered and signed by him as if he were solely responsible, and only countersigned (if thought necessary) by the deputy. Moreover, the Commissioners regard it of great importance that in each department there should be framed a complete code of rules and regulations for the carrying on of all the work of the department, and every officer of the department should be required to make himself familiar with this code.

Your Commissioners are of opinion that the service should be entirely free from political favouritism or patronage; that appointments should only be made by merit after competitive examination; and, that for that purpose, a permanent Commission of three officials should be created to deal with the question of the service; that this Commission should be entrusted with all examinations in connection with the service; that they should cause different examinations to be made in the different subjects required by the several classes employed in the Civil Service. To illustrate the meaning and taking for instance, the Department of Agriculture, your Commissioners find that the Civil Service Commission in Great Britain require examinations from the veterinary staff in pathology and bacteriology and also into the Diseases of Animals Act; while in the Botanical Gardens they require examinations in systematic and structural botany; in the Customs there is required, in the case of a second class clerk, lower section, for port service an examination in inorganic chemistry with elements of physics; in the Inland Revenue in Great Britain, besides ordinary subjects, geometry and elementary chemistry are considered; in the Public Works office examinations in estimates and specifications, the use and properties of materials and survey and levelling are required. In a word, in every distinct service in the Imperial government an examination is instituted suitable to the particular service.

In addition to the examinations the Commissioners consider that it would be desirable that such commission should have power to inspect from time to time, say not seldomer than once a year, every department of the government service: such inspection to cover the whole management of each department, these inspection reports to be promptly considered by the Commissioners and such action taken thereon by them as they may deem necessary for the maintenance or improvement of the efficiency of the service both outside and inside.

Your Commissioners consider that appointments made under this system in the public service should be supplemented by a rigid system of probation.

Your Commissioners are of opinion that somehow or other the immediate question of salaries should be dealt with. They cannot recommend general increases, but they would suggest to Your Excellency in Council the advisability of at least taking votes for granting increases to deserving officials, and that for eastern Canada, both in the inside and outside service, such increase might be at the rate of 15 per cent for officials whose salaries are under $1,500 and 12½ per cent for salaries above that rate; and for the western provinces where no doubt a greater need prevails, these scales should be 25 and 20 per cent to the same proportion of incomes and all provisional allowances should cease. Your Commissioners suggest that such increases should only be granted on rigid examination, but as time goes on, if the suggestions of your Com-

missioners are carried into effect, these special increases should be abolished and a scale of salaries laid down suitable to each department and office in the public service.

Your Commissioners have in conclusion to point out that they are unanimously agreed that a comprehensive superannuation system should be placed on the statute book; and that this system in the present state of the Dominion should include pensions to dependents of civil servants, for there seems little doubt that with the exception of slight set backs the conditions of life in the Dominion are and are likely to be such that advances in the prices of commodities will be the rule, and it will be almost impossible for the average civil servant to effect any savings from his salary. With that view your Commissioners consider that the time has arrived when an efficient pension system should be put into force.

Your Commissioners have endeavoured to the best of their powers to thoroughly sift the conditions prevailing in the Civil Service. Possibly they have allowed their inquiries to extend rather beyond what might have been considered the limits laid down, but your Commissioners are of opinion that to get at the full knowledge required to make a report their inquiries should be as extensive as possible. With this view they construed the reference as to efficiency and sufficiency of the departmental staffs as including in its scope the control of the appropriations granted by parliament.

In fact your Commissioners could hardly have done otherwise considering how their attention had been directed to these matters by statements in parliament and in the public press.

Your Commissioners, in conclusion, cannot but express their sense of the high importance of the Civil Service and the necessity of doing everything possible to improve it. While there are many conscientious, hard working and efficient men in it, it cannot be denied that there are some otherwise. It cannot be doubted either that it is a much more difficult proposition to preserve a uniformly high state of efficiency in a government staff than in the ordinary work of the world carried on by money making organizations. This, your Commissioners think is generally recognized, but to achieve any real success in either field the supreme necessity is character which above all means conscience. No government can ignore this and live. While demanding the highest character they should do everything possible to develop it, and one of the first things necessary is to see that its servants can at least live in a moderate degree of comfort, and, that after that a career be opened to every one in the service in which the rewards will be justly proportioned to the value of the service rendered.

All of which is respectfully submitted.

J. M. COURTNEY,
THOS. FYSHE,
P. J. BAZIN.

Ottawa, Ont.,
February 28th, 1908.

APPENDICES

APPENDIX A.

At the request of the Royal Commission the undersigned respectfully presents the following statement in support of the claims of employees of the Dominion for greater liberality at the hands of government and parliament in providing for payment of the public service.

Nine tables have been prepared from official and other authentic sources to supply the Commission with evidence in the pursuit of its investigations.

Tables A, B, C, D, E, F and G relate to the prices of articles which enter into the cost of living for the period of fifteen years following the inquiry made in 1892, and tables H and I relate to the salaries and wages of the employees of manufacturing establishments in the same period.

Tables A and B are wholesale market prices of food stuffs, groceries, &c., in the cities of Montreal and Toronto, compiled from records of weekly quotations for the years 1892, 1896, 1901 and 1906. For the former city the quotations of the *Journal of Commerce* have been taken, and for the latter those of the *Monetary Times*, and the yearly averages show for each article the highest and lowest prices as computed from the quotations.

Tables C and D are average prices of articles prepared from the trade tables of imports and exports of the Dominion, computed from quantities and values for each year of the period. Import prices are shown for twenty-four articles, embracing dairy products, meats, groceries, coal, woollen and cotton goods and carpets; and export prices are shown for nineteen articles, embracing dairy products, meats, fish, breadstuffs, fruit and lumber.

Tables E and F are compiled from tables C and D to show average prices of the same kinds of articles for the five-year periods of 1892-96, 1897-1901 and 1902-1906, together with relative prices of the second and third periods, compared with the first taken as 100 or standard.

Table G shows the relative retail prices of thirty principal articles of food in the United States during the seventeen years 1890-1906, the average price for the ten years 1890-1899 being taken as 100 or standard, as compiled by the Bureau of Labour at Washington and published in its Bulletin for July of this year.

Table H presents the average wage earnings of all persons employed in the factory industries of Canada and the provinces for the census years 1891, 1901 and 1906, with percentages of increase of earnings in the periods; and table I the average earnings by sexes for officers and other employees for the census years 1901 and 1906 for the Dominion and the provinces, together with the per cent increase of earnings in the five years.

TABLE A.—Wholesale prices of food articles, &c., in the Montreal market for the years 1892, 1896, 1901 and 1906, compiled from the weekly quotations of the *Journal of Commerce.*

Schedule.		1892.			1896.		
		$ cts.		$ cts.	$ cts.		$ cts.
Flour—							
Patent	Brl.	4 77	to	4 98	4 17	to	4 24
Strong bakers	"	4 40	to	4 54	3 93	to	3 88
Straight roller	"	4 33	to	4 48	3 81	to	3 97
Oatmeal—							
Granulated	Bag.	1 99½	to	2 05	1 51	to	1 57
Rolled	"	2 10	to	2 10			
Beans	Bush.			1 47	1 12½	to	1 17½
Butter—							
Finest creamery	Lb.	0 20½	to	0 20½	0 18	to	0 18¾
Township dairy	"	0 18½	to	0 19¼	0 15¾	to	0 17
Western	"	0 15⅝	to	0 17	0 12	to	0 14½
Cheese—							
Finest western white	"	0 09¼	to	0 09½	0 08¾	to	0 09
Finest western coloured	"	0 09¾	to	0 09⅞	0 08¼	to	0 08½
Eastern	"	0 09⅝	to	0 09¾	0 09	to	0 09¼
Eggs, fresh	Doz.	0 14	to	0 15	0 13¾	to	0 15¼
Eggs, limed	"	0 13¼	to	0 14 7/16			
Bacon, smoked	Lb.	0 10 5/16	to	0 11	0 08½	to	0 09½
Hams, city cured	"	0 10⅛	to	0 11⅜	0 08½	to	0 10½
Pork, short cut	Brl.	16 33	to	17 13	12 25	to	13 06
Pork, mess	"	15 30	to	16 05	12 66	to	13 14
Lard	Lb.	0 08½	to	0 09	0 05¾	to	0 06½
Honey	"	0 07¼	to	0 08¾	0 08½	to	0 09
Potatoes	Bag.	0 61	to	0 67	0 35	to	0 40
Tea, Japan, good to fine	Lb.	0 17½	to	0 25	0 17	to	0 19
Tea, Japan, finest	"	0 27½	to	0 30	0 26	to	0 36
Tea, Japan, choicest	"	0 34	to	0 37½	0 22½	to	0 25
Coffee, Java	"	0 27½	to	0 31	0 23½	to	0 27
Sugar, granulated	"	.....		0 04 7/16	0 04½	to	0 04½
Sugar, yellow	"	0 03½	to	0 04¼	0 03¼	to	0 03⅝
Molasses	Gal.	0 30½	to	0 32½	0 30½	to	0 33½
Raisins, Valencia	Lb.	0 04¾	to	0 05¼	0 04¾	to	0 05¼
Currants, Provincial	"	0 05¼	to	0 05¼	0 03¾	to	0 04¾
Coal oil, Canadian	Gal.	0 13¾	to	0 14½	0 15¾	to	0 16¾
Coal oil, American	"	.....		0 20½	0 19¼	to	0 20
Apples, green	Brl.	2 70	to	3 27	2 73	to	3 73

TABLE A—*Continued.*

—		1901.		1906.	
		$ cts.	$ cts.	$ cts.	$ cts.
Flour—					
Patent	Brl.	4 22	to 4 25	4 53	to 4 60
Strong bakers	"	3 89	to 4 05	4 12	to 4 31
Straight roller	"	3 52	to 3 62	3 86	to 3 97
Oatmeal—					
Granulated	Bag.	2 05	to 2 17		
Rolled	"	.....		2 13	to 2 15
Beans	Bush.	1 50	to 1 56	1 56	to 1 64
Butter—					
Finest creamery	Lb.	0 19¾	to 0 20¼	0 21½	to 0 22¾
Township dairy	"	0 17½	to 0 18¾	0 19¼	to 0 20¼
Western	"	0 15½	to 0 16	0 18½	to 0 19½
Cheese—					
Finest western white	Lb.	0 09¼	to 0 09¾	0 12	to 0 12¼
Finest western coloured	"	0 09½	to 0 09¾	0 12 1/16	to 0 12¼
Eastern	"	0 09	to 0 09¼	0 11¾	to 0 12¼
Eggs, fresh	Doz.	0 17¼	to 0 18¼	0 19¾	to 0 20½
Eggs, lined	"	0 15	to 0 16	0 15⅝	to 0 17¼
Bacon, smoked	Lb.	0 13½	to 0 15	0 15	to 0 16
Hams, city cured	"	0 13	to 0 14⅛	0 14¼	to 0 14½
Pork, short cut	Brl.	19 64	to 20 07	21 75	to 22 50
Pork, mess	"	19 00	to 19 83	21 80	to 22 19
Lard	Lb.	0 07½	to 0 08½	0 11½	to 0 12⅛
Honey	"	0 08¼	to 0 10	0 08¼	to 0 09¾
Potatoes	Bag.	0 58½	to 0 67½	0 78	to 0 92
Tea, Japan, good to fine	Lb.	0 19	to 0 20		
Tea, Japan, finest	"	0 26	to 0 36	0 16	to 0 40
Tea, Japan, choicest	"	0 22½	to 0 25		
Coffee, Java	"	0 22	to 0 25		0 31
Sugar granulated	"	0 04⅞	to 0 04¾		0 04¼
Sugar, yellow	"	0 03 7/16	to 0 04¼	0 03¾	to 0 04⅛
Molasses	Gall.	0 28	to 0 34⅝		0 34
Raisins, Valencia	Lb.	0 06	to 0 07¼	0 04¼	to 0 04⅛
Currants, Provincial	"	0 09¼	to 0 11	0 04½	to 0 04¾
Coal oil, Canadian	Gall.	0 16	to 0 17		
Coal oil, American	"	0 17¾	to 0 18¾		0 19¾
Apples, green	Brl.	3 71	to 4 79	2 92	to 4 37

TABLE B.—Wholesale Prices of Food Articles, &c., in the Toronto Market for the Years 1892, 1896, 1901 and 1906, compiled from the weekly quotations of the *Monetary Times*.

Commodity.		1892.		1896.	
		$ cts.	$ cts.	$ cts.	$ cts.
Flour	Bbl.	4 83	to 4 89	4 17	to 4 28
Manitoba patents	"	4 43	to 4 57	3 70	to 3 90
Strong bakers	"	3 67	to 3 77	3 30	to 3 40
Straight extra	"	3 88	to 3 98		3 00
Cornmeal	Bush.	...	...	0 94	to 1 01
Beans					
Butter	Lb.				
Prints, creamery	"	0 13	to 0 16½	0 13½	to 0 14½
Tubs	"	0 10½	to 0 11	0 08½	to 0 09½
Cheese	"	0 01½	to 0 01½	0 02½	to 0 04
Apples, fresh	"	0 06½	to 0 07½		
Apples, evaporated	Bbl.	11 50	to 13 17	10 25	to 10 50
Beef, mess	"	15 62	to 16 25		13 00
Pork, mess					
Bacon	Lb.	0 07½	to 0 08½	0 05½	to 6 00
Long clear	"	0 10½	to 0 11½	0 09½	to 0 10
Smoked	"	0 11	to 0 11½	0 09½	to 0 10½
Hams	"	0 09½	to 0 10	0 07½	to 0 08½
Lard		0 13	to 0 14½	0 12½	to 0 12½
Eggs, fresh	Doz.	0 15	to 0 16		
Eggs, cured	"	0 29	to 0 33	0 27½	to 0 32
Coffee, Mocha	Lb.	0 04½	to 0 06	0 06½	to 0 06½
Coffee, Maracaibo	"	0 05½	to 0 06	0 04½	to 0 05½
Coffee, Rio	"	0 05½	to 0 05½		
Prunes	"	0 03	to 0 03½	0 03	to 0 03½
Molasses, pale table	Gall.	0 36	to 0 43	0 32½	to 0 45
Molasses	Lb.	0 11½	to 0 17	0 08	to 0 15
Pepper, black	"	0 20	to 0 23½	0 20	to 0 25
Pepper, white	"	0 04½	to 0 05	0 04½	to 0 04½
Sugar, gran. dried	"	0 03½	to 0 04	0 03½	to 0 03½
Sugar, brown	"	0 30	to 0 55	0 35	to 0 65
Tea, Oolong	"	0 17	to 0 20	0 13½	to 0 18½
Tea, Japan	"	0 20	to 0 40	0 23½	to 0 29½
Tea, Ceylon	"				
Tobacco					
Myrtle navy	"		0 60		0 60
Briar	"		0 55		0 47
Oil, petroleum					
Canadian, 5 to 10 barrel lots	Per gall.		0 14½	0 16½	to 0 16½
American, water white	"	0 23	to 0 24	0 20½	to 0 22

TABLE B—*Continued.*

Schedule.		1901.				1906.			
		$	cts.	$	cts.	$	cts.	$	cts.
Flour—									
Manitoba patent	Brl.	3	98	to	4	21	4	53	to 4 60
Strong bakers	"	2	60	to	3	85			4 34
Straight roller	"	2	93	to	2	99	3	45	to 3 53
Oatmeal	"	3	64	to	3	91	2	49	to 2 55
Beans	Bush.	1	71⅞	to	1	72½	1	69	to 1 77½
Butter—									
Prints, creamery	Lbs.	0	19½	to	0	20½	0	22½	to 0 24
Dairy	"	0	14½	to	0	16	0	17½	to 0 19½
Cheese	"	0	09½	to	0	10	0	13 1/16	to 0 13½
Apples, dried	"	0	04½	to	0	05½			0 06
Apples, evaporated	"	0	06½	to	0	07½			0 10½
Beef, mess	Brl.	11	50	to	12	00			
Pork, mess	"	17	50	to	19	25	19	50	to 20 42
Bacon—									
Long clear	Lb.	0	10 1/16	to	0	10½	0	11	to 0 11½
Smoked	"	0	13 1/16	to	0	13½	0	14½	to 0 15½
Hams	"	0	13½	to	0	13½	0	13½	to 0 14½
Lard	"	0	11	to	0	11½	0	11½	to 0 11½
Eggs, fresh	Doz.	0	13½	to	0	15	0	17 3/16	to 0 18½
Eggs, limed	"						0	15½	to 0 16
Coffee, Mocha	Lb.	0	25	to	0	32	0	20	to 0 28
Raisins, Valencia	"	0	06½	to	0	07½			0 5½
Currants, Fil	"	0	08½	to	0	10	0	05½	to 0 05½
Prunes	"	0	07½	to	0	07½			0 08
Syrup, pale amber	"	0	03½	to	0	03½	0	03½	to 0 04½
Molasses	Gall.	0	25	to	0	40	0	30	to 0 50
Pepper, black	Lb.	0	17½	to	0	18	0	16½	to 0 20½
Pepper, white	"	0	28	to	0	30	0	25½	to 0 44½
Sugar, granulated	"	0	04½	to	0	04½			0 04½
Sugar, brown	"				0	03½			0 03 1/16
Tea, Oolong	"	0	35	to	0	65	0	35	to 0 65
Tea, Japan	"	0	17½	to	0	31	0	18	to 0 35
Tea, Ceylon	"	0	22	to	0	29½	0	22	to 0 24
Tobacco—									
Myrtle navy	Lb.				0	70			0 74
Brier	"				0	63			0 70
Oil, petroleum—									
Canadian, 5 to 10 barrels	Gall.				0	14½			0 14½
American, water white	"	0	16½	to	0	16½			0 16 7/16

TABLE C.—Import prices of 24 articles which enter into the cost of living in Canada for the fifteen years 1892-1906.

Articles.		1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
		$	$	$	$	$	$	$	$
Butter	Lb.	0·206	0·206	0·182	0·160	0·172	0·156	0·159	0·183
Cheese	"	0·090	0·091	0·091	0·088	0·075	0·084	0.080	0·078
Bacon and hams	"	0·093	0·101	0·116	0·104	0·091	0·086	0·072	0·076
Beef, salted	"	0·042	0·040	0·043	0·042	0·043	0·036	0·045	0·050
Pork, in brine	"	0·051	0·072	0·075	0·066	0·049	0·039	0·049	0·051
Coffee, green	"	0·198	0·187	0·191	0·182	0·195	0·150	0·101	0·098
Cocoa and chocolate	"	0·200	0·219	0·188	0·177	0·172	0·166	0·192	0·194
Tea	"	0·161	0·165	0·148	0·152	0·143	0·136	0·135	0·141
Currants, dried	"	0·037	0·037	0·022	0·020	0·019	0·023	0·036	0·029
Raisins, dried	"	0·037	0·033	0·029	0·028	1·029	0·037	0·039	0·037
Sugar	"	0·027	0·026	0·028	0·021	0·022	0·022	0·020	0·022
Molasses	Gall.	0·216	0·212	0·202	0·205	0·213	0·176	0·160	0·206
Coal, anthracite	Ton.	3·81	4·24	4·15	3·81	3·60	3·91	4·00	3·72
Coal, bituminous	"	2·51	2·46	2·42	2·28	2·13	2·07	1·85	1·70
Woollen goods—									
Cashmeres[1]		0·777	0·747	0·677	0·672	0·667	0·639	0·539	0·554
Coatings and overcoatings[1]		0·626	0·593	0·622	0·603	0·597	0·604	0·526	0·586
Tweeds[1]		0·831	0·806	0·808	0·727	0·702	0·701	0·542	0·604
Flannels[1]		0·760	0·764	0·658	0·670	0 642	0·534	0·159	0·136
Socks and stockings[2]		1·100	1·024	0·904	0·144	0·147	0·141	0·135	0·140
Wool, washed	Lb.	0·165	0·157	0·151	0·146	0·135	0·154	0·1[illegible]	0·142
Cotton goods—									
Cotton fabrics, printed or dyed	Yd.	0·059	0·074	0·072	0·078	0·080	0·080	0·078	0·087
Cotton wool or raw cotton	Lb.	0·081	0·088	0·083	0·063	0·085	0·079	0·067	0·060
Carpets, Brussels	Yd.	0·692	0·633	0·612	0·607	0·564	0·564	0·590	0·621
Carpets, tapestry	"	0·284	0·313	0·235	0·300	0·320	0·310	0·327	0·325

[1] Per lb. for 1892-1897 and per yard 1898-1906.

[2] Per lb. for 1892-1894 and per pair for 1895-1906.

TABLE O—*Continued.*

Articles.		1900.	1901.	1902.	1903.	1904.	1905.	1906.
		$	$	$	$	$		$
Butter	Lb.	0·206	0·232	0·229	0·266	0·239	0·228	0·221
Cheese	"	0·144	0·109	0·101	0·122	0·115	0·143	0·164
Bacon and hams	"	0·104	0·119	0·119	0·143	0·132	0·115	0·110
Beef, salted	"	0·047	0·048	0·052	0·057	0·043	0·045	0·046
Pork, in brine	"	0·053	0·068	0·083	0·091	0·068	0·068	0·073
Coffee, green	"	0·100	0·106	0·086	0·084	0·090	0·096	0·101
Cocoa and chocolate	"	0·194	0·192	0·188	0·180	0·176	0·180	0·176
Tea	"	0·144	0·138	0·151	0·144	0·149	0·139	0·143
Currants, dried	"	0·030	0·070	0·039	0·027	0·031	0·031	0·033
Raisins, dried	"	0·047	0·057	0·047	0·058	0·052	0·043	0·041
Sugar	"	0·024	0·023	0·020	0·018	0·019	0·027	0·021
Molasses	Gall.	0·261	0·241	0·180	0·197	0·209	0·214	0·195
Coal, anthracite	Ton.	3·99	4·10	4·25	4·83	4·60	4·64	4·68
" bituminous	"	1·53	1·97	1·85	2·19	2·22	1·98	1·85
Woollen goods—								
Cassimeres[1]		0·553	0·513	0·507	0·555	0·538	0·681	0·651
Coatings and overcoatings.[1]		0·599	0·499	0·569	0·587	0·593	0·620	0·635
Tweeds[1]		0·591	0·603	0·549	0.541	0·519	0·531	0·528
Flannels[1]		0·155	0·183	0·186	0·184	0·173	0·174	0·177
Socks and stockings[2]		0·124	0·145	0·133	0·143	0·149	0·147	0·149
Wool, washed	Lb.	0·196	0·151	0·133	0·155	0·150	0·239	0·236
Cotton goods—								
Cotton fabrics, printed or dyed	Yd.	0·095	0·096	0.096	0·095	0·102	0·103	0·100
" wool or raw cotton	Lb.	0·077	0·097	0·087	0·088	0·122	0·099	0·112
Carpets, Brussels	Yd.	0·609	5·631	0·632	0·643	0·661	0·659	0·708
" tapestry	"	0·331	0·333	0·356	0·357	0·390	0·374	0·357

[1] Per lb. for 1892–1897 per yard for 1898–1906.

[2] Per lb. for 1892–1894 and per pair for 1895–1906.

TABLE D.—Export Prices of 19 Articles which enter into the cost of living in Canada for the fifteen years 1892-1906.

Articles.		1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
		$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Eggs	Doz.	0·137	0·127	0·139	0·124	0·123	0·131	0·121	0·131	0·143	0·145	0·149	0·194	0·182	0·198	0·169
Butter	Lb.	0·184	0·184	0·198	0·191	0·179	0·182	0·182	0·183	0·203	0·202	0·203	0·204	0·192	0·187	0·207
Cheese	"	0·098	0·100	0·100	0·097	0·084	0·089	0·089	0·088	0·107	0·106	0·098	0·108	0·103	0·094	0·113
Bacon and hams	"	0·095	0·106	0·103	0·095	0·082	0·085	0·094	0·089	0·094	0·112	0·115	0·112	0·102	0·105	0·117
Beef	"	0·044	0·059	0·065	0·077	0·051	0·044	0·060	0·068	0·077	0·084	0·096	0·087	0·086	0·069	0·070
Pork	"	0·055	0·091	0·050	0·062	0·048	0·036	0·032	0·026	0·041	0·069	0·087	0·092	0·104	0·084	0·074
Meats, canned	"	0·099	0·099	0·093	0·092	0·088	0·064	0·092	0·087	0·107	0·113	0·102	0·107	0·100	0·092	0·100
Mackerel, pickled	Brl.	8·348	9·711	9·083	9·511	12·870	10·868	11·965	12·386	13·152	7·056	7·786	11·625	10·293	10·983	8·349
Lobsters, canned	Lb.	0·162	0·141	0·154	0·149	0·148	0·183	0·192	0·210	0·226	0·204	0·212	0·225	0·236	0·235	0·270
Salmon, canned	"	0·101	0·106	0·099	0·098	0·113	0·104	0·082	0·092	0·078	0·082	0·102	0·111	0·113	0·130	5·108
Beans	Bush.	1·304	1·287	1·215	1·212	1·017	0·738	0·730	0·785	1·073	1·347	1·465	1·560	1·591	1·282	1·578
Pease, split	"	0·941	0·865	0·835	0·839	0·793	0·671	0·806	0·934	0·942	0·959	1·136	[1]	[1]	1·114	1·157
Potatoes	"	0·50	0·379	0·362	0·382	0·381	0·319	0·437	0·484	0·485	0·411	0·517	0·585	0·556	0·549	0·521
Flour of wheat	Brl.	4·684	4·244	3·965	3·763	3·848	3·653	4·343	3·918	3·634	3·589	3·652	3·649	3·861	4·448	4·034
Oatmeal	"	4·021	4·003	3·497	3·443	3·307	3·045	3·137	3·305	3·256	3·081	3·755	3·708	3·701	3·803	4·079
Apples, dried	Lb.	0·056	0·057	0·069	0·059	0·047	0·032	0·049	0·053	0·050	0·044	0·061	0·051	0·053	0·044	0·058
Apples, green	Brl.	2·091	2·300	2·906	2·135	2·497	1·504	2·974	2·437	2·695	2·185	3·035	2·757	2·872	2·533	3·354
Planks and boards	M. ft.	11·28	11·28	7·01	11·09	10·40	10·07	10·90	10·59	11·41	12.75	15·45	14·68	15·41	15·01	15·98
Shingles	M.	2·06	2·00	1·94	1·90	1·93	1·76	1·76	1·73	1·86	1·84	1.95	2·02	2·05	2·03	2·03

[1] Not specified in the trade returns.

TABLE E.—Average and relative import prices of 24 articles which enter into the cost of living in Canada for the five-year periods of 1892-1896, 1897-1901 and 1902-1906, and relative prices for the same periods, 1892-1896 being 100.

Articles.		Average price in			Relative price in		
		1892-1896.	1897-1901.	1902-1906.	1892-1896.	1897-1901.	1902-1906.
		$	$	$	p.c.	p.c.	p.c.
Butter	Lb.	0·180	0·184	0·237	100·0	102·2	131·7
Cheese	"	0·088	0·093	0·117	100·0	105·7	133·0
Bacon and hams	"	0·100	0·088	0·120	100·0	88·0	120·0
Beef, salted	"	0·042	0·045	0·048	100·0	107·1	114·3
Pork, in brine	"	0·060	0·053	0·076	100·0	88·3	126·7
Coffees, green	"	0·191	0·110	0·092	100·0	57·6	48·2
Cocoa and chocolate	"	0·190	0·189	0·179	100·0	99·4	94·2
Tea	"	0·153	0·139	0·145	100·0	90·8	94·8
Currants, dried	"	0·027	0·034	0·032	100·0	125·9	118·5
Raisins, dried	"	0·031	0·044	0·048	100·0	141·9	154·8
Sugar	"	0·025	0·022	0·021	100·0	88·0	84·0
Molasses	Gall.	0·208	0.210	0·199	100·0	101·0	95·6
Coal, anthracite	Ton.	3·92	3·95	4·60	100·0	100·7	117·3
Coal, bituminous	"	2·36	1·80	2·02	100·0	76·3	85·6
Woollen goods—							
Cassimeres[1]		.....	1898-01: 0·537	1903-06: 0·592	.....	1898-01: 100·0	1903-06: 110·2
Coatings and overcoatings[1]		.....	1898-01: 0·552	1903-06: 0·610	.....	1898-01: 100·0	1903-06: 110·1
Tweeds[1]		.....	1898-01: 0·588	1903-06: 0·529	.....	1898-01: 100·0	1903-06: 90·0
Flannels[1]		.....	1898-01: 0·161	1903-06: 0·177	.....	1898-01: 100·0	1903-06: 110·0
Socks and stockings[2]		[3]0·145	[3]0·132	[3]0·148	[3]100·0	[3]91·0	[3]101·1
Wool, washed	Lb.	0·152	0·207	0·176	100·0	136·2	115·8
Cotton goods—							
Cotton fabrics, printed and dyed	Yd.	0·073	0·088	0·099	100·0	120·6	135·6
Cotton wool or raw cotton	Lb.	0·079	0·075	0·101	100·0	94.9	127·8
Carpets, Brussels	Yd.	0·626	0·607	0·659	100·0	97·0	105·3
Carpets, tapestry	"	0·306	0·326	0.368	100·0	106·5	120·3

[1] Per lb. for 1892-1897 and per yard for 1898-1906.
[2] Per lb. for 1892-1894 and per pair for 1895-1906.
[3] Last two years of each period.

TABLE F.—Average and relative export prices of 19 articles which enter into the cost of living in Canada for the five-year periods of 1892-96, 1897-1901 and 1902-1906, and relative prices for the same periods, 1892-1896 being 100.

Articles.		Average price in			Relative price in		
		1892-1896.	1897-1901.	1902-1906.	1892-1896.	1897-1901.	1902-1906
		$	$	$	p. c.	p. c.	p. c.
Eggs	doz.	0·130	0·136	0·173	100·0	104·6	133·1
Butter	lb.	0·187	0·192	0·199	100.0	102·6	106·4
Cheese	"	0·095	0·096	0·103	100·0	101·1	108·4
Bacon and hams	"	0·093	0·095	0·116	100·0	102·1	124·7
Beef	"	0.072	0·077	0·084	100·0	106.9	116·7
Pork	"	0·061	0·037	0·094	100·0	60·6	154·1
Meats, canned	"	0·094	0·091	0·097	100·0	96·8	103·2
Mackerel, pickled	brl.	9·405	9·922	9·426	100·0	105·5	100·2
Lobsters, canned	lb.	0·150	0·203	0·236	100·0	135·3	157·3
Salmon, canned	"	0·103	0·086	0.109	100·0	83·5	105·8
Beans	bush.	1·212	0·947	1·436	100·0	78·1	118·5
Pease, split	"	0·856	0·808	[1] 1·137	100 0	94·4	132·8
Potatoes	"	0·392	0·426	0·543	100·0	108·7	138·5
Flour of wheat	brl.	4·162	3·880	3·940	100·0	93·2	93·2
Oatmeal	"	3·697	3·157	3·800	100·0	85·4	102·8
Apples, dried	lb.	0·059	0·046	0·052	100·0	78·0	88·1
Apples, green	brl.	2·299	2·179	2·910	100·0	94·8	126·6
Planks and boards	M. ft.	11·16	11·09	14·94	100·0	99·4	133·9
Shingles	M.	1·97	1·79	2·02	100·0	90·9	102·4

[1] Average for 3 years, 1902, 1905 and 1906.

TABLE G.—Relative retail prices of the principal articles of food in the United States, 1890 to 1906, average price for 1890-1899 being 100.

Year.	Apples evaporated.	Beans, dry.	Beef, fresh, roasts.	Beef, fresh, steaks.	Beef, salt.	Bread, wheat.	Butter.	Cheese.	Chickens (full grown) dressed.	Coffee.	Corn meal.	Eggs.	Fish, fresh.	Fish, salt.	Flour, wheat.
1890	109·0	103·3	99·5	98·8	97·5	100·3	99·2	98·8	101·3	105·4	100·0	100·6	99·3	100·7	109·7
1891	110·3	106·2	100·0	99·4	98·3	100·3	106·4	100·3	104·0	105·2	109·7	106·9	99·6	101·7	112·5
1892	99·3	102·4	99·6	99·3	99·5	100·3	105·8	101·5	103·8	103·8	105·2	106·8	100·1	102·2	105·1
1893	107·0	105·0	99·0	93·6	100·3	100·1	109·9	101·8	104·2	104·8	103·1	108·1	100·1	103·4	96·1
1894	105·8	102·8	98·3	98·2	98·9	99·9	101·7	101·6	98·6	103·3	102·2	96·3	100·4	101·5	88·7
1895	97·4	100·5	98·6	99·1	99·6	99·7	97·0	99·2	98·4	101·7	100·8	99·3	99·8	98·9	89·0
1896	88·6	92·7	99·1	99·5	99·8	99·9	92·7	97·9	97·1	99·6	95·0	92·8	100·2	97·5	92·7
1897	87·8	91·5	109·3	100·2	100·9	100·0	93·1	99·0	94·0	94·6	93·7	91·4	99·8	95·2	104·3
1898	95·4	95·9	101·7	102.0	102·1	99·8	95·1	97·5	96·8	91·1	95·0	96·2	100·5	98·8	107·4
1899	99·5	99·7	103·7	103·9	103·2	99·6	97·7	102·4	101·8	90·5	95·1	101·1	100·2	100·2	94·6
1900	95·2	110·0	106·5	106·4	103.7	99·7	101·4	103·9	100·8	91·1	97·4	99·9	100·4	99·1	94·3
1901	96·8	113·9	110·7	111·0	106·1	99·4	103·2	103·3	103·0	90·7	107·1	105·7	101·4	100·9	94·4
1902	104·4	116·8	118·6	118·5	116·0	99·4	111·5	107·3	113·2	89·6	118·8	119·1	105·0	102·8	94·9
1903	100·8	118·1	113·1	112·9	108·8	100·2	110·8	100·4	118·5	89·3	120·7	125·3	107·3	108·4	101·2
1904	99·2	116·8	112·8	113·4	108·3	103·9	109·0	107·4	120·7	91·8	121·5	130·9	107·9	111·7	118·9
1905	106·0	116·3	112·2	112·9	107·9	104·5	112·7	110·9	123·6	93·6	122·2	131·6	109·9	113·8	119·9
1906	115·6	115·2	115·7	116·5	110·8	102·3	118·2	115·5	129·1	94·7	123·2	134·2	116·2	116·8	108·1

TABLE G.—Relative prices of the principal articles of food, &c.—*Concluded.*

Year.	Lard.	Milk, fresh, unskimmed.	Molasses.	Mutton and Lamb.	Pork, fresh.	Pork, salt, Bacon.	Pork, salt, dry or pickled.	Pork, salt, Ham.	Potatoes, Irish.	Prunes.	Rice.	Sugar.	Tea.	Veal.	Vinegar.
1890	98·2	100·5	104·7	100·7	97·0	95·8	95·3	98·7	109·3	116·8	101·3	118·6	100·0	98·8	102·9
1891	99·8	100·5	101·7	100·6	98·7	96·6	98·9	99·3	116·6	116·5	102·5	112·7	100·4	99·6	105·5
1892	103·6	100·6	101·2	101·0	100.5	99·1	100·5	101·9	95·7	113·5	101·3	96·2	100·2	100·0	102·7
1893	117·9	100·4	100·6	99·9	107·0	109·0	108·7	109·3	112·3	115·6	98·4	101·5	100·1	100·0	99·5
1894	106·9	100·2	100·3	97·8	101·8	103·6	103·4	101·9	102·6	100·9	99·0	93·8	98·7	98·7	99·8
1895	109·1	100·0	99·0	98·7	99·7	99·4	99·2	98·8	91·8	94·2	98·8	91·8	98·5	98·5	98·9
1896	92·5	99·9	98·7	98·7	97·4	96·7	95·5	97·6	77·0	86·8	96·7	96·6	98·8	99·5	97·2
1897	89·8	99·7	97·7	99·6	97·6	97·4	97·3	98·2	93·0	84·3	97·9	95·7	98·5	99·9	97·4
1898	93·9	99·4	97·9	100·4	98·6	100·2	99·1	95·1	105·4	86·3	101·7	101·3	100·7	101·2	97·9
1899	97·1	98·9	98·2	102·6	101·7	102·9	101·8	99·2	96·1	85·1	102·4	101·7	104·4	103·7	98·3
1900	104·4	99·9	102·2	105·6	107·7	109·7	107·7	105·3	93·5	83·0	102·4	104·9	105·5	104·0	98·5
1901	118·1	101·1	101·3	109·0	117·9	121·0	117·5	110·2	116·8	82·6	103·5	103·0	106·7	106·8	98·9
1902	134·3	103·3	102·1	114·7	128·3	135·6	132·5	119·4	117·0	83·4	103·5	96·0	107·2	115·2	99·5
1903	126·7	105·8	103·8	112·6	127·0	139·8	129·0	121·3	114·8	80·2	103·9	96·1	106·0	114·9	99·1
1904	117·3	106·3	104·0	114·1	124·0	137·9	125·8	118·4	121·3	79·6	101·6	101·9	105·8	115·5	98·9
1905	116·6	107·0	104·4	117·8	126·6	138·8	126·0	118·5	110·2	81·4	102·6	103·9	105·7	117·7	100.3
1906	128·0	108·9	105·3	124·1	137·7	150·4	136·9	127·2	114·4	85·1	105·7	98·2	105·5	123·2	103·6

TABLE II.—Average wage-earnings of all persons employed in factory industries in Canada and the provinces for the census years 1891, 1901 and 1906, with percentages of increase in the periods.

Provinces.	1891.	1901.	1906
	$	$	$
Canada	271·87	329·18	417·86
British Columbia	311·71	476·39	479·44
Manitoba	432·88	463 60	559·31
New Brunswick	223·84	259·69	318·86
Nova Scotia	207·08	241·09	383·28
Ontario	299·01	339·39	433·44
Prince Edward Island	139·27	117·18	152·59
Quebec	261·51	331·28	393·60
The Territories	393 29	398·77	541·77
	1891 to 1901.	1901 to 1906.	1891 to 1906.
Per cent increase in Canada	21·08	26·94	53·70
British Columbia	52·83	0·64	53·47
Manitoba	7·09	20·65	29·20
New Brunswick	16·01	22·79	42·45
Nova Scotia	16·42	58·98	85·09
Ontario	13·50	27·71	44·96
Prince Edward Island	15·86	30·22	9·57
Quebec	26·68	18·81	50·51
The Territories	1·44	35·86	37·73

TABLE I.—Average earnings by officers, managers, clerks and working persons employed in factory industries in Canada and the provinces for the census years 1901 and 1906, by sexes, with percentages of increase in the period.

		1901.	1906.	Increase.
		$	$	per cent.
Canada—				
Officers, managers and clerks	Male.	833 46	916 52	9·97
" " "	Female.	316 86	360 25	13·69
Other employees over 16 years	Male.	333 65	418 71	25·50
" " " "	Female.	175 72	222 33	26·52
Children under 16 years		106 11	148 37	39·83
British Columbia—				
Officers, managers and clerks	Male.	1,120 07	1,134 80	1·31
" " "	Female.	495 40	518 87	4·74
Other employees over 16 years	Male.	465 53	458 02	1·61
" " "	Female.	115 52	170 72	47·78
Children under 16 years		105 55	113 76	7·78
Manitoba—				
Officers, managers and clerks	Male.	878 47	1,056 70	20·28
" " "	Female.	435 05	442 39	1·69
Other employees over 16 years	Male.	443 01	531 97	20·08
" " "	Female.	230 09	310 44	34·92
Children under 16 years		112 86	183 42	62·52
New Brunswick—				
Officers, managers and clerks	Male	722 99	777 60	7 55
" " "	Female	230 14	332 73	44·58
Other employees over 16 years	Male	256 66	312 34	21·69
" " "	Female	143 78	178 28	23·99
Children under 16 years		93 64	116 07	23·95
Nova Scotia—				
Officers, managers and clerks	Male	638 01	786 88	23 22
" " "	Female	273 46	261 05	4·54
Other employees over 16 years	Male	253 93	398 43	56·90
" " "	Female	103 41	151 21	46·22
Children under 16 years		60 02	107 91	79·19
Ontario—				
Officers, managers and clerks	Male	845 68	926 33	9.54
" " "	Female	323 69	357 06	10·31
Other employees over 16 years	Male	346 53	433 23	25·00
" " "	Female	189 90	237 17	24·89
Children under 16 years		113 21	161 89	43·00
Prince Edward Island—				
Officers, managers and clerks	Male.	361 20	436 50	20·85
" " "	Female.	121 33	239 28	97·21
Other employees over 16 years	Male.	139 49	159 12	14·22
" " "	Female.	44 64	60 19	34·84
Children under 16 years		31 63	55 01	73·64
Quebec—				
Officers, managers and clerks	Male.	831 65	903 49	8·64
" " "	Female.	300 77	374 17	24·40
Other employees over 16 years	Male.	330 38	399 02	20·78
" " "	Female.	187 27	221 09	18·59
Children under 16 years		113 78	147 01	29·20
The Territories—				
Officers, managers and clerks	Male.	900 23	1,015 03	12·75
" " "	Female.	375 00	411 94	7·18
Other employees over 16 years	Male.	357 70	500 18	39·83
" " "	Female.	334 61	265 26	20·72
Children under 16 years		115 00	216 80	88·52

The Montreal and Toronto market prices are given for the years 1892, 1896, 1901 and 1906, being at intervals of five years, which show fairly the movements of prices for food articles over a period of 15 years. The figures are not complete for every article, but in almost every case they are given for one market or the other. Flour was slightly lower in 1906 than in 1892, the average decrease being about six per cent in Toronto and ten in Montreal. There was a small increase in the price of oatmeal in Toronto, but nearly 35 per cent decrease in Montreal. Butter shows an increase of about four cents per pound in Toronto and two cents in Montreal, and cheese 2½ cents in both markets. Fresh eggs were dearer in Toronto by 4½ cents and in Montreal by 5½ cents per dozen in 1906 than in 1892. All meats also show large increases in both cities—mess pork an increase of $4 per barrel in Toronto and $6.32 in Montreal; bacon, 3½ cents per pound in Toronto and 5 cents in Montreal; hams, 3½ cents in Toronto and Montreal, and lard 2 cents in Toronto and 3¼ cents in Montreal. The general increase in the prices of meats and other animal products in the two cities from 1892 to 1906 was about 30 per cent, ranging from 20 to 45 per cent. The prices of groceries were on the whole somewhat increased. It may be said, however, that the quotations are not in all cases strictly comparable, and that these deductions should be accepted with a measure of reserve. They are not mathematically accurate, but are safe for approximate conclusions.

Better because more complete data are supplied in tables C and D, being the average prices of imports and exports computed from the trade tables. These show that, beginning with 1900, prices of articles which enter into the cost of living have been gradually rising, except in the case of tea, coffee and sugar. Comparison of prices is more readily made in tables E and F, where averages are shown for three periods of five years each, namely, 1892-1896, 1897-1901 and 1902-1906. The averages of the first period being taken as 100—a standard or index number—it will be seen that prices of imports have increased for 17 articles out of 24 and of exports for 17 out of 19. For imported butter, cheese, bacon and hams, salted beef and pork in brine, the average of the five years 1902-1906 is higher than in the five years 1892-1896 by 14.3 to 33 per cent, and that for exported articles of the same class the corresponding prices are higher by 3.2 to 54.1 per cent. For eggs the increase is 33.1; butter, 6.4; cheese, 8.4; bacon and hams, 24.7; beef, 16.7; pork, 54.1, and canned meats, 3·2 per cent. Coffee, cocoa, chocolate, tea, sugar and molasses were below the standard of import prices in the last period of five years, but currants and raisins were above it by 18·5 and 54·8 per cent respectively. Anthracite coal increased by 17·3 per cent, woollen goods, except tweeds, by about 10 per cent, and cotton fabrics by 35.6 per cent. The export price of canned lobsters increased 57.3 per cent; beans, 18.5; split pease, 32·8; potatoes, 38·5, and green apples, 26·6 per cent. Flour of wheat fell 6.8 per cent and dried apples 12 per cent, but the price of planks and boards, the raw material of the house-builder, increased by 33.9 per cent.

The United States table (G) of retail prices embraces breadstuffs, meats, fruits, groceries, &c., to the number of 30 food articles. It covers a period of 17 years, and is relative in the sense that the average price computed for the ten years, 1890-1899, is taken as standard or 100, with which the prices of each year are compared. In the case of 18 articles the figures for 1900 exceed the standard, and from that year forward there was nearly a steady increase in relative prices. The following table shows the comparison for the years 1892 and 1906 with the standard of 100 for the 10 years, 1890-1899, together with the increase of 1906 over 1892, and of the standard or index number for 1890-1899.

Articles of Food.	Relative Prices to Standard in—		Increase of 1906 Prices over—	
	1892.	1906.	1892.	Standard or 100.
Apples, evaporated	99·3	115·6	16·3	15·6
Beans, dry	102·4	115·2	12·8	15·2
Beef, fresh, roasts	99·6	115·7	16·1	15·7
Beef, fresh, steaks	99·3	116·5	17·2	16·5
Beef, salt	99·5	110·8	11·3	10·8
Bread of wheat	100·3	102·3	2·0	2·3
Butt	106·8	118·2	11·4	18·2
Cheese	101·5	115·5	14·0	15·5
Chickens (full grown, dressed)	103·8	129·1	25·3	29·8
Coffee	103·8	94·7	—9·1	—5·3
Corn meal	105·2	123·2	18·0	23·2
Eggs	106·8	134·2	27·4	34·2
Fish, fresh	100·1	116·2	16·1	16·2
Fish, salt	102·2	116·8	14·6	16·8
Flour of wheat	105·1	108·1	3·0	8·1
Lard	103·6	128·0	24·4	28·0
Milk, fresh, unskimmed	100·6	108·9	8·3	8·9
Molasses	101·2	105·3	4·1	5·3
Mutton	101·0	124·1	23·1	24·1
Pork, fresh	100·5	137·7	37·2	37·7
Pork, salt, bacon	99·1	150·4	51·3	50·4
Pork, salt, dry or pickled	100·5	136·9	36·4	36·9
Pork, salt, ham	101·9	127·2	25·3	27·2
Potatoes	95·7	114·4	18·7	14·4
Prunes	113·5	85·1	—28·4	—15·1
Rice	101·3	105·7	4·4	5·7
Sugar	96·2	98·2	2·0	—1·8
Tea	100·2	105·5	5·3	5·5
Veal	100·0	123·2	23·2	23·2
Vinegar	102·7	102·6	—0·1	2·6

The minus sign (—) prefixed to numbers shows a decrease for 1906 as compared with the relative prices of 1892 and 1890-99. It occurs only in the case of four articles; all others show increases, ranging from 2 to 51.3 per cent over the 1892 and 2.3 to 50.4 per cent over the standard prices. In the case of four articles, viz.: eggs, mutton, fresh pork, and salt, dry or pickled pork, the relative increase of 1906 over the standard is more than 30 per cent; and of five, viz.: chickens, corn meal, lard, mutton, salt pork and hams and veal it is 20 to 30 per cent more; while in the case of nine articles, viz.: evaporated apples, dry beans, roast beef, beefsteak, butter, cheese, fresh fish, salt fish and Irish potatoes it is 15 to 20 per cent more. There are five articles, viz.: wheat flour, fresh milk, molasses, rice and tea in which the average increase of 1906 is 5 to 10 per cent more than the standard, two in which the increase is less than five per cent above the standard, and three in which the price is below it. The relative prices of coffee, prunes and vinegar are alone lower in 1906 than in 1892; those of fresh pork, salt pork and bacon, and salt, dry and pickled pork are 36.4 to 51·3 per cent higher; those of chickens, eggs, lard, mutton, salt pork, ham and veal are 23.2 to 27.4 per cent higher; and those of evaporated apples, dry beans, roast beef, beefsteak, salt beef, butter, cheese, corn meal, fresh fish, salt fish, and Irish potatoes are 11·3 to 18·7 per cent higher.

It is obvious therefore that according to all prices quoted from Canadian and American sources food articles have increased substantially in cost to the consumer in the fifteen years, 1892 to 1906. It is difficult to say definitely how much that increase has been, partly because true averages cannot be computed from such a variety of quotations—wholesale prices, retail prices and prices ascertained from the quantities and values of trade tables. But the increase price of food articles in the period

may be taken to range from 15 to 20 per cent*; and for other articles, such as re fuel, light, clothing, taxes, &c., the rate of increase has been fully as large.

A comparison of salaries is made as an example in the following table to sh the averages paid to permanent employees in four of the principal departments government in the years 1892, 1900 and 1905, viz., the Departments of Agricultu Customs, Finance and Post Office, together with the per cent of increase in t periods in each department:—

Departments.	Average salary per employee in			Per cent of increase.		
	1892.	1900.	1905.	1892 to 1900.	1900 to 1905.	1892 to 1905.
	$	$	$			
Agriculture	1,11[illegible]	1,232	1,273	11·0	3·3	14·6
Customs	1,046	1,223	1,157	16·9	-5·4	10·6
Finance	1,360	1,426	1,436	4·8	0·7	5·6
Post Office	898	959	941	6·8	-0·2	4·8

There are decreases in the average salaries of Customs and Post Office in t years 1900 to 1905; and while in the salaries of Agriculture there was an increase 14·6 per cent in the years 1892 to 1905, there was an increase of only 10·6 per cent those of Customs, of 5·6 per cent in those of Finance and of 4·8 per cent in those Post Office, which are far below the rate of increase in the cost of living in the sam period.

Tables II and I furnish another instructive comparison with the salaries of go ernment employees and the cost of living in the average salaries and wages paid employees of factory works in Canada, as shown for the census years 1891, 1901 an 1906.

The census of 1891 grouped under one head the earnings for salaries and wage and therefore table II makes a comparison for the three census years in that form It shows that for the whole of Canada the earnings of factory employees increase 21·0 per cent from 1891 to 1901, 26·94 per cent from 1901 to 1906 and 53·70 per cen

* The average per cent increase of 1906 over each of the ten years, 1892-1901, in the United Stat all food (30 articles) weighted according to family consumption was as follows:—

	Per cent.
1892	13·5
1893	10·8
1894	16·0
1895	18·3
1896	21·2
1897	20·1
1898	17·2
1899	16·3
1900	14·4
1901	10·0

Prices were highest in the second and tenth years of this period. The average for 1906 was greater tha for any other year of the decade by 13·5 to 21·2 per cent, and greater than for six of the years by 16 p cent and over.

from 1891 to 1906. Percentages are given in the table in the same way for each province of the Dominion, from which it appears that in the two large manufacturing provinces of Ontario and Quebec the increase of average earnings of all employees in the 15 years was 44·96 per cent in Ontario and 50·51 per cent in Quebec.

Table I shews the earnings separately in the Dominion and each of the provinces for the two chief classes of officers and workers, and while the Commissioners are referred to the details in the table it may suffice to point out for the Dominion as a whole (1) that in the period of five years the average salaries per head of male officers, managers and clerks increased $83 or 10 per cent and of females $13.39 or 13·69 per cent; (2) that the average earnings of other employees (workers) increased $85 per head or 25½ per cent for males and $16.61 or 26½ per cent for females, and (3) that the average earnings of children under 16 years of age increased $12 per head or 39·83 per cent. These increases, be it noted, relate to the period of five years ending with 1905,—the last census of manufactures, taken in 1906, being for the calendar year 1905.

The force and meaning of this illustration are in the statement of it. Canada in all of its affairs is in a condition of large prosperity, and although it has been true during the last fifty years that the notion of public economy most strongly impressed upon the people relates to the cost of the Civil Service, it does appear to be reasonable that the persons chosen to conduct the business of the country and entrusted by government and parliament with that responsibility should be paid a wage commensurate with the quality of their labour, and with the needs of their lives in the conditions which environ them.

ARCHIBALD BLUE.

APPENDIX B.

AN ACT RESPECTING THE SUPERANNUATION OF PERSONS EMPLOYED IN THE CIVIL SERVICE OF CANADA.

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. This Act may be cited as *The Civil Service Superannuation Act, 1907-8.* Short title.

2. The Civil Service, for the purposes of this Act, includes and consists of— Interpretation.

(*a.*) All officers, clerks and employees in or under the several departments of the executive government who are employed continuously, and to whom *The Civil Service Act* applies; Persons under Civil Service Act.

(*b.*) All such officers, clerks and employees of the second or outside division of the Civil Service as the Governor in Council, from time to time, designates, and to whom *The Civil Service Act* does not apply, and who are employed continuously in an established capacity; Certain persons in the outside Service

(*c.*) The permanent officers and servants of the Senate and House of Commons, and the permanent officers and servants employed in the Library of Parliament, saving all rights and privileges of either House in respect to the appointment or removal of its officers and servants: Officers and servants of Senate and Commons.

Provided that the Civil Service for the purposes of this Act shall not include any person who by the provisions of Part II of the Royal Northwest Mounted Police Act is made subject to the application of that Act instead of this Act. Exception.

3. This Act shall apply to such officers, clerks and employees in the Civil Service as shall have been appointed on or after the first day of July, one thousand nine hundred and eight, and to such other officers, clerks and employees, appointed to the Civil Service prior to the said date, to whom the provisions of this Act are declared by any other Act to apply. Application.

4. In any case of doubt the Governor in Council may, by general or special regulations, determine to what persons the provisions of this Act do or do not apply, and the conditions on which, and the manner in which, they shall apply in any case or class of cases. Regulations.

5. The Governor in Council may grant a superannuation allowance not exceeding the allowance hereinafter authorized to any person who has served in an established capacity in the Civil Service for ten years or upwards, and who has attained the age of sixty years or become incapacitated by bodily infirmity from properly performing his duties. Eligibility.

2. The superannuation of any person to whom this Act applies shall not be deferred beyond the attainment by such person of the age of sixty-five years: provided that the Governor in Council may defer the superannuation of such person for a further period not exceeding one year, if he deems it in the public interest so to do. Limit of active service, age 65.

Breaks in service not to be counted.

6. If the service has not been continuous, the period or periods during which such service has been interrupted shall not be counted.

Preliminary inquiry by Treasury Board.

7. The superannuation of every civil servant to whom the provisions of this Act apply shall be preceded by an inquiry by the Treasury Board,—

(a) Whether the person it is proposed to superannuate is eligible within the meaning of this Act; and

(b) Whether the superannuation of such person will result in benefit to the service, and is therefore in the public interest; or

(c) Whether superannuation has become necessary in consequence of the mental or physical infirmity of such persons or by reason of such persons having reached the age of sixty-five years.

Report of Board.

8. No civil servant shall be superannuated unless the Treasury Board reports that he is eligible within the meaning of this Act; and no civil servant who is less than sixty-five years of age shall be superannuated unless the Treasury Board reports in addition that such superannuation will be in the public interest.

ALLOWANCES AND GRATUITIES TO CIVIL SERVANTS.

Rates of allowances.

9. The superannuation allowance hereinbefore mentioned shall be calculated upon the average yearly salary, during the last three years of service, of the person to whom such allowance is to be made, and shall not exceed, if the person has served for ten years, but less than ten and one-half years, an annual allowance of ten-fiftieths of such average salary, and if he has served for ten and one-half, but less than eleven and one-half years, an annual allowance of eleven-fiftieths thereof, and in like manner a further addition of one-fiftieth of such average salary for each additional year of service, similarly reckoned, up to thirty-five years when an annual allowance of thirty-five-fiftieths may be granted, but no addition shall be made for any service beyond thirty-five years.

Ten years may be added.

10. The Governor in Council may, in the case of any person who entered the Civil Service after the age of thirty years, as being possessed of some peculiar professional or other qualifications or attainments required for the office to which he was appointed, and not ordinarily to be acquired in the public service, add to the actual number of years of service of such person, such further number of years not exceeding ten as is considered equitable, for reasons stated in the order in council made in the case, and such additional number of years shall be taken as part of the term of service on which the superannuation allowance of such person shall be computed.

Diminished allowance if service unsatisfactory.

11. If the head of a department reports with respect to any person employed in his department, and about to be superannuated, from any cause other than that of ill-health or age, that the service of such person has not been satisfactory, the Governor in Council may, as to him seems fit, grant such person a superannuation allowance less than that to which he would have otherwise been entitled.

Gratuity when yearly allowance not earned.

12. If any person to whom this Act applies is constrained, from any infirmity of body or mind, to quit the Civil Service before the period at which a superannuation allowance might be granted him, the Governor in Council may allow him a gratuity not exceeding one month's pay for each year of his service; and if any such person is so constrained to quit the service before such period, by reason of severe bodily injury, received without his own fault, in the discharge of his public duty, the Governor

in Council may allow him a gratuity not exceeding three months' pay for every two years' service, or a superannuation allowance not exceeding one-fifth of his average salary during the then last three years.

Compensation if retirement compulsory.

13. If any person to whom this Act applies is removed from office in consequence of the abolition of his office for the purpose of improving the organization of the department to which he belongs, or is removed or retired from office to promote efficiency or economy in the Civil Service, the Governor in Council may, as compensation for his loss of office, grant such person, if his term of service is less than ten years, a gratuity not exceeding three months' pay for every two years' service; and if such person's term of service is ten years but less than twenty-five years, the Governor in Council may grant him, in addition to the superannuation allowance to which his term of service entitles him, a gratuity not exceeding one month's pay for each year's service; but no gratuity or compensation other than the superannuation allowance to which his term of service entitles him, shall be granted to any such person whose term of service is twenty-five years or upwards.

Receipts and payments.

14. The amounts deducted from salary under the terms of section 15 of this Act shall form part of the Consolidated Revenue Fund; and the superannuation and other allowances and gratuities granted under this Act shall be payable out of the said Consolidated Revenue Fund.

CONTRIBUTIONS.

Rate of contribution 4 per cent. Limitation.

15. A deduction shall be made from the salary of every civil servant to whom this Act applies at the rate of four per centum per annum on such salary; but such deduction shall be made only during the first thirty-five years of service.

Account No. 3 to be kept.

2. An account shall be kept, to be called the Civil Service Superannuation Account, Number Three, of all amounts received and paid out under the provisions of this Act, and the balance to the credit of the said account at the end of any fiscal year shall be at least equal to the present value of the prospective allowances and gratuities granted or grantable to persons subject, at the end of such fiscal year, to the provisions of this Act; such present value to be ascertained upon the basis of such standard or other tables of mortality as are, in the opinion of the Governor in Council, appropriate, and a rate of interest not exceeding four per centum per annum.

Provision for valuation.

COMPULSORY RETIREMENT.

When.

16. Retirement shall be compulsory on every person to whom the superannuation allowance hereinbefore mentioned is offered, and such offer shall not be considered as implying any censure upon the person to whom it is made; nor shall any person be considered as having any absolute right to such allowance, but it shall be granted only in consideration of good and faithful service during the time in respect of which it is calculated.

No absolute right to allowance.

Right of dismissal unimpaired.

17. Nothing herein contained shall be understood as impairing or affecting the right of the Governor in Council to dismiss or remove any person from the Civil Service.

DEATH BEFORE SUPERANNUATION; DISMISSAL.

Contributions may be repaid in

18. In the event of death before superannuation of any person to whom this Act applies, such person being at the time of his death a contributor

Event of death in certain cases.

under the provisions of section 15 of this Act, or having so contributed during thirty-five years of service, and no widow, or child below the age of eighteen years, surviving him, the Governor in Council may, on the recommendation of the Treasury Board, pay to the heirs of such person the whole, or such portion as is deemed expedient, of the amount so contributed by such person.

In event of dismissal.

2. The Governor in Council may, on the recommendation of the Treasury Board, pay to any person dismissed from the public service of Canada after the first day of July, one thousand nine hundred and eight, who at the time of such dismissal was contributing under the provisions of section 15 of this Act, or who had so contributed during thirty-five years of service, the whole, or such portion as is deemed expedient, of the amount so contributed by such person.

With interest.

3. The Governor in Council may also, on the recommendation of the Treasury Board, in addition, pay to the persons referred to in the first two subsections of this section, interest to the date of such death or dismissal, as the case may be, on the contributions so repaid, or any portion thereof, at such rate of interest, not exceeding four per centum per annum, and calculated in such manner, as the Governor in Council deems advisable.

In discretion of Governor in Council.

19. Nothing in the last preceding section contained shall be construed to confer upon any person any right to demand or enforce the repayment of any amount contributed by such deceased or dismissed person, or any interest thereon, and all payments made under the last preceding section shall be wholly in the discretion of the Governor in Council.

FORFEITURE OF ALLOWANCE.

In what cases forfeitable.

20. Every person who receives a superannuation allowance, and is under the age of sixty years, and is not disabled by bodily or mental infirmity, may be called upon to fill, in any part of Canada, any public office or situation for which his previous services render him eligible, and which is not lower in rank or emolument than that from which he retired; and if he refuses or neglects so to do, he shall forfeit his said allowance.

PROVISION FOR WIDOWS AND CHILDREN.

General conditions of grant.

21. Subject to the provisions hereinafter contained, the Governor in Council may, on the recommendation of the Treasury Board, grant an annual allowance for life to the widow, and an annual allowance until attainment of the age of eighteen to each of the children, of any civil servant to whom this Act applies, who at the time of his death was either actively employed in the public service of Canada, or was in receipt of a superannuation allowance.

Cases when allowance shall not be granted.

22. Such annual allowance shall not be granted in the following cases:—

(a.) If the person to whom it is proposed to grant the allowance is, in the opinion of the Treasury Board, unworthy of it;

(b.) If the civil servant married after being superannuated;

(c.) If the civil servant was at the time of his marriage over sixty years of age;

(d.) In the case of a civil servant who married after the first day of July, one thousand nine hundred and eight, if he was more than twenty years older than his wife;

(e.) If the civil servant died within one year after his marriage, unless he was manifestly in good health at the time of his marriage, and his death was caused by disease or injury not due to causes within his own control, and the Treasury Board is satisfied that there are no other objections to the granting of the allowance.

Rates of allowances to widows; and to children.

23. The annual allowance to the widow of a civil servant, if such civil servant has served for a period of twenty years or upwards, shall not exceed one-fourth, and if such civil servant has served for a period of less than twenty years, shall not exceed one-third, of the annual superannuation allowance which the civil servant was in receipt of, or to which he would have been entitled, as the case may be; and the annual allowance to a child may be fifty dollars but shall not exceed one hundred dollars; Provided, however, that the annual allowance granted to the widow of a civil servant shall not exceed six hundred dollars; provided, further, that the total amount paid during any one year to the widow and children of a civil servant shall not exceed one-half of the annual superannuation allowance which the civil servant was in receipt of, or to which he would have been entitled, as the case may be.

Special allowance if child in great need.

2. Any provision of subsection one of this section to the contrary notwithstanding, there may be granted to the child of a civil servant, if such child be motherless and, in the opinion of the Treasury Board, in great need, an annual allowance not exceeding two hundred dollars.

Gratuity to widow.

3. In the event of a civil servant dying before the period at which a superannuation allowance might be granted him under the terms of this Act, the Governor in Council may allow his widow a gratuity not exceeding one month's pay for each year of his service.

Allowance to cease on remarriage of widow.

24. A widow's or a child's allowance shall be discontinued if she or it becomes unworthy of it.

2. If a widow remarries, her allowance shall cease from the day following that of her marriage.

REPORTS.

Annual to Parliament.

25. The Minister of Finance shall lay before Parliament within fifteen days after the commencement of each session thereof,—

(a) a statement of all superannuations and retiring allowances within the year granted under the terms of this Act, giving the name and rank of each person superannuated or retired, his salary, age and length of service, the allowance granted to him on retirement, the cause of his superannuation and whether the vacancy has been subsequently filled, and if so, whether by promotion or by new appointment, and the salary of the new incumbent;

(b) a statement of all allowances granted to widows and children of civil servants under this Act within the year, showing the name, age and sex of each person to whom any such allowance has been granted; and the name, age at death, salary and length of service of the civil servant to whose dependents such allowance or allowances have been granted;

(c) a statement showing the condition of the Civil Service Superannuation Account, Number Three, at the end of the last preceding fiscal year.

Order in council to be laid before Parliament.

26. The order in council made in any case of superannuation, or of granting an allowance, shall be laid before Parliament at its then current or next ensuing session.

FINANCE DEPARTMENT,
OTTAWA, CANADA, March 23, 1908.

J. M. COURTNEY, Esq., C.M.G., I.S.O.,
Chairman Civil Service Commission,
Ottawa.

DEAR SIR,—With reference to the report of your Commission, which was placed in the hands of the Minister of Finance on the 17th instant, I am requested by Mr. Fielding to call your attention to the remarks made by Messrs. Fyshe and Bazin, on page 33 (MS. page 59) thereof, on the subject of the Department of Marine and Fisheries:

'Your Commissioners have taken up and at great labour have followed through some of the files of this department, making extracts as they went along, which have been rewritten as nearly as possible in chronological order and which are now available and can be examined if required. The judgments they have formed are based largely on these extracts and what they have seen in the offices.'

I am now requested to say that as these 'extracts' appear to have an important bearing on the conclusions formed by Messrs. Fyshe and Bazin, it seems desirable that they should be included in the report. I have, therefore, to ask that you will be good enough to forward the extracts in question to me as soon as possible.

Yours truly,

T. C. BOVILLE,
Deputy Minister of Finance.

460 WILBROD STREET,
OTTAWA, March 24, 1908.

T. C. BOVILLE, Esq.,
Deputy Minister of Finance.

DEAR SIR,—In reply to your letter of yesterday, I now beg to forward the extracts made by my colleagues in connection with their remarks respecting the Marine and Fisheries Department in the report of the Civil Service Commission.

Yours very truly,

J. M. COURTNEY.

CHALLENGED ACCOUNTS, &c.

MARINE AND FISHERIES DEPARTMENT.

(Quebec, Montreal, St. John, Halifax, Victoria, Charlottetown.)

June 22, 1905.—Accountant Davison sent to Quebec to reorganize bookkeeping in conformity with system at Sorel and Prescott.

Memo. re expenditures by M. and F. re Lighthouses—Extravagance and loose management at Quebec Agency.

May 31, 1905.—I am of opinion that in the Quebec agency alone a saving of at least $25,000 per annum can be made by compelling the agent to obtain authority for his expenditures over ordinary supplies and maintenance. The undersigned is of the opinion that the same system should be adapted to each agency of the department, and begs to make the following recommendation:—1st. That Mr. Davison visit each agency of the department, so that a uniform system of accounting should prevail at each. 2nd. That he should determine the amount required for each agency for ordinary maintenance and supplies; and 3rd. That the agents be compelled to get authority from the department for any expenditure. If this is not carried out, the department can look for an overdraft for the next fiscal year of from $50 to $100,000. (Signed J.F.F. Approved, R.P.)

Telegram—Gregory to Department—Employees in distress for back pay.

September 8, 1905.—Sending back construction pay-lists to-day. Parent may not be here for 3 weeks. Office besieged with poor women wanting money. Pay-lists are correct. Parent will certify them when he comes back. Have telegram him pressing me pay them. Have no money pay with, nor return $5,000 advance, owing to every cent being out. Answer whether you will pay or not that can do so, or send people away empty-handed.

September 9.—Answer: Draw for amount of construction pay-lists. Show this telegram to bank as authority. B. of M. usually cash such drafts at par.—W. L. MAGEE, for Deputy.

September 13.—See Letter—Deputy.

September 20, 1905.—Gregory was instructed to incur no expenditure exceeding $100 without receiving approval from headquarters.

Irregularities at Quebec Agency.—Lost accounts.

December 21, 1905.—Deputy to Gregory: Severe arraignment of management of agency *re* lost accounts of Samson & Filion. I regret to state that this is but one more of the many irregularities connected with the Quebec agency, and I am advised that only in one case is a responsible officer's name connected with the orders given. But no doubt exists that the orders were given, and very probably the material was supplied. The cost of fitting up these fog alarm stations in Quebec has been so great that it has practically crippled the construction vote for two years.

December 26, 1905.—A. E. Parent's explanation? ? See Stumbles XX.

January 3, 1906.—Commissioner of Lights J. F. Fraser writes L. E. Côté, Technical Assistant Commissioner of Lights, about accounts received from Samson & Filion for pipes, valves, &c., for various stations below Quebec. Certified to by you. The bills are dated September and October, 1904. Please advise me if you are aware, either through a personal check or through that of your assistants, that the material billed was received. $3,685.06.

B.H.F. (Assistant Chief Engineer).—The material, so far as I know, was ordered by the Quebec agency on lists furnished by Mr. Côté. I knew nothing of the matter until the accounts were received, and a casual inspection shows that many things were ordered that were supplied by the Fog Signal Company and should not have been necessary at these stations.

January 3, 1906.—Deputy writes to Côté about same accounts.

January 9, 1906.—Côté replies. After so long a time I could not be expected to know if the material had been received. As far as I can remember now, the bills seem correct, and I return them after certifying them, as you instruct me to do. (Very inadequate explanation.)

Iron slab for moulding boat frames.

February 6, 1906.

March 14, 1906.—Depty writes Gregory about a perforated cast-iron slab, for moulding boat frames, 6 feet square by ¾-inch thick, $237.87, ordered by Gregory. Memo. by B.H.F.: 'Order should have been approved by Parent. Money was not available, and agent should have let it stand over till next year. 3rd. Amount more than he should have expended without authority from deputy, in view of his strict instructions. 4th. A glance at the requisition will show that the article is not properly described, nor is the price mentioned. Cannot judge of the price charged but that a casting 6 feet square by ¾ inch thick should require 18 solid days in the planer seems to me ridiculous.

May 3, 1905.—Dear Mr. Gregory.—Young Willie Walsh, who represents McColl Bros. & Co., Montreal agents for Vesta Boiler Compound, has asked me to say a good word to you for him; and if the material is as good as represented, I hope you will place some orders in his way.—C. Fitzpatrick.

May 6, 1905.—Mr. W. Leo. C. Walsh, representing McColl Bros. & Co., will call on you, probably Tuesday, in reference to some oil. If you can give him an order, I will feel obliged.—R.P.

Kantslip.

March 14, 1905.—Letter from department, asking explanation of bill from McColl Bros. & Co. for Kantslip, $548. With the present information in my possession, I am inclined to believe that you have ordered a very large amount of this material for which the department has no present use.

March 16, 1905.—Gregory replies that stuff was purchased on direction of the Hon. R.P. on the wharf at Quebec, who directed me, then and there, to give a good order to the agent of McColl Bros. & Co., Mr. Leo C. Walsh, who stood beside him at the time. That was over a year ago. I gave an order to Mr. Walsh, as requested and when the goods arrived, I was somewhat surprised at the size of the package and I refused to take them; and a lengthy correspondence took place between McColl Bros. & Co. and myself on the subject—in fact, I declined to give them any more

orders. Subsequently, I received a letter from the late minister, as well as another from Hon. Mr. Fitzpatrick, copies of which I herewith inclose. An opportunity some time after occurred when I saw the late minister here and spoke to him, as it seemed to me that that firm had taken advantage of his kindness about the matter. He told me to keep the goods and try to get rid of them to the best advantage, which I did by distributing them around where I understood the Kantslip could be used on belts, &c. If any has been sent where it was not really required, I shall see that it is removed where it can be used to advantage.

The new system now established of informing you immediately of any order I may receive from the minister or deputy minister verbally will avoid for the future any misunderstanding.

March 21, 1906.—See Gregory's letter.

Delay paying salaries.

April 2, 1906.—Gregory telegraphs: Please send cheques for salary staff and resident engineer—in great distress.

April 28, 1906.—Letter to Gregory shows a different spirit from what had prevailed formerly—indicating the change of head of department.

Prices extravagant.

June 30, 1906.—Auditor General calls attention to various accounts rendered during the current fiscal year by J. B. Côté, Quebec, for sundry lighthouse supplies amounting, so far as the vouchers sent me show, to nearly $5,000, and to inquire if the prices, certified in each case by Mr. Gregory, are the ordinary retail prices, or prices specially agreed upon, in view of the large quantities purchased.

July 11, 1906.—Letter from Auditor General: Reference to accounts rendered by J. B. Morin, Quebec, for plumbing and other repairs to lightships in Quebec district during last year, to amount of $2,122.79, and to inquire if prices charged were determined by contract or agreement between your department and Mr. Morin, or if they are merely the ordinary prices charged for work and material, irrespective of the amount involved.

Reply to this, September 24.

July 11, 1906.—Gregory's reply to Auditor General's letter, June 30. New work done by Côté at prices agreed upon, but repairing of oil tanks, lamps, &c., no prices can be fixed. When work is completed satisfactorily, prices are examined, and if found fair and just, the accounts are certified. All his work has been satisfactory and prices just.

July 12, 1906.—Letter from Auditor General. Accounts rendered by J. J. Murphy, Quebec, $4,075.08, for lumber, cement, &c., delivered at the Quebec agency for use in connection with maintenance of lights, and to point out that so far as the accounts show, the prices charged and certified to by the agent as fair and just, are merely the ordinary retail prices for which supplies might be obtained, irrespective of the quantities required or the amount involved.

July 13.—Similar letter about Samson & Filion's account for lighthouse supplies, &c., amounting to $10,000, nearly.

July 13.—Similar letter *re* Terrieaux & Racine's account.

July 16.—Letter from deputy to Gregory, saying Auditor General is calling attention to payments, amounting to $4,816.94, to C. A. Parent for lighthouse supplies, and wanting to know about prices—whether agreed upon or merely retail.

July 6.—Similar letter from Auditor General about accounts, La Compagnie Martineau, for lighthouse supplies amounting to $2,088.17.

July 6.—Similar letter *re* accounts Mechanics' Supply Company, Quebec.

July 12.—Gregory's reply. I have the honour to state that the prices charged by the Mechanics' Supply Company and La Compagnie Martineau are the market prices of goods they sell to contractors and dealers in their line. The prices for all iron are fixed every year, and prices have been settled with Messrs. Chas. A. Parent, Samson & Filion, La Compagnie Martineau, and others for bar iron, boiler plates and other goods in their line.

About prices—A.G.'s inquiries.

July 19, 1906.—Gregory writes about Auditor General's inquiry regarding prices. I beg respectfully to state that the prices charged by J. J. Murphy, Samson & Filion, Terreau & Racine, are all fixed and agreed upon in advance. (Query.—What evidence is there of this—say copy of agreement or correspondence thereanent). If lower rates are expected I have no idea how you can obtain them. There has been no other system in the service before or since Confederation, and it remains with the department to establish means of effecting a change.

July 19.—Similar letter regarding accounts C. A. Parent. The prices certified in the account as fair and just are prices agreed upon, and the same as given by other hardware firms on the list of patronage of this agency.

July 19.—*Re* Morin's account for plumbing. 'Prices charged by J. B. Morin are in perfect keeping with those charged by the other plumbers and tinsmiths on the patronage list of this agency, and I know of no means of making a contract between the department and a plumber.

July 27, 1906.—See deputy's letter to Gregory on next page, authorizing him to buy chemical fire extinguishers from P. E. Perreault.

Delayed Payments.

August 10, 1906.—Telegram from Gregory: 'Please send cheque $640.50 pay list Cape Bauld June last sent 20th ulto. Families in distress for want of money.'

Shocking delay in settlement of accounts.

August 13.—Letter from Mailloux, Acct. Quebec agency, in connection with certain 'accounts left here by you' to be arranged immediately and return them to you so as to enable you to have them paid before the 15th inst. G. T. Davie & Sons, F. X. Drolet. These acounts were forwarded to the department in the month of October last.

About prices—A.G.'s inquiries.

August 29.—Gregory replies to points raised by Auditor General as to prices and to deputy's letter in which he says: 'but you do not say whether you always purchase from the lowest tenderer for each article you mention on the list you send out for quotation.' (Gregory's reply avoids any reference to tenders. Evidently there are no tenders.)

As to lumber, I get prices for lumber from the different dealers. The foreman goes around the different lumber yards and chooses what he wants; then the one whose price is the lowest for the same grade of lumber establishes the price we allow any one; and if they do not accept that price we take it from the one who will do so.

I have never been ordered to adopt any other means to carry out the intentions of the department than those I have just mentioned.

Patronage.

August 29, 1906.—The same system is adopted for groceries, and prices have been approved of by the Department of Marine and Fisheries at Ottawa as per your letter of April 28, 1906. I have always been directed to divide the patronage amongst the different parties in my list and do my best to carry this order out.

Delayed pay-list.

September 13, 1906.—Gregory telegraphs: 'Please send funds pay-list ending with August to recoup me. September fortnight will be due Saturday and I have nothing on hand to pay with.

Seven different Letters to say what could have been said in one.

September 24, 1906.—Seven different letters by deputy to Auditor General about methods of fixing prices, referring to following names:—C. A. Parent, Samson & Filion, Martineau & Co., Mechanics Supply Co., Terreau & Racine, J. J. Murphy, Richelieu and Ontario Navigation Company, J. B. Morin.

Fire extinguishers.

July 27, 1906.—I have to inform you that if you consider that chemical fire extinguishers are necessary on board the vessels of the Quebec agency you are to purchase them from P. E. Perreault, 312 St. John St., Quebec. Mr. P. has been advised to call upon you in connection with this matter.

October 8, 1906.—Gregory writes about fire extinguishers bought from Perreault who is now an employee of the agency and has a lot of fire extinguishers on hand which he would like to sell to the department. Under the circumstances, as he is a poor man with a family and now unable to go out and solicit their sale. This was well understood by the late lamented minister, who was his friend, and fully recognized the worthiness of the said chemical fire enxtinguishers. I would recommend that the department take them off his hands, as we have several stations requiring such protection.

October 12, 1906.—Letter from deputy: 'With reference to fire extinguishers purchased by you from P. F. Perreault, I find no authority on file in the department for the purchase of these fire extinguishers and I notice that within the last couple of years large purchases have been made from this gentleman. In this connection I may say that in 1904-5 the late minister purchased from Mr. Charles Patton fire extinguishers to the sum of $9,000. If this number 142 were sent to Quebec for the use of your agency lighthouses and Dominion steamers. Besides that a number were stored in Montreal and are there still. If you had notified the department that fire extinguishers were absolutely necessary to put on board the Dominion steamers and to be used at lighthouses the required number could have been sent from Montreal. Instead of this it appears you made purchases from Mr. Perreault without any instructions or authority from the department. The minister would like to have an explanation in regard to this matter. He would also like to have a statement of how the fire extinguishers purchased in 1904-5 were distributed.

October 8, 1906.—Gregory writes to department in answer to their letters of October 4 and 5 returning P. E. Perreault's accounts for chemical fire extinguishers and asking me to inform you upon what authority the purchases were made. He refers to letter of July 27, 1906.

October 15, 1906.—In this letter Gregory says: 'I shall have a statement prepared by the Inspector of Lights as soon as possible showing how the fire extinguishers purchased in 1904-5 were distributed, and forward the same to the department.'

(This statement appears never to have been received by the department.)

MEMO. SHOWING DISTRIBUTION OF PATTON'S FIRE EXTINGUISHERS, QUEBEC AGENCY.

Received 50 from Dominion Lighthouse Depot, Prescott, Ont., May 8, 1905—Deliveries, 1906.

Amherst island lighthouse, 1; Anticosti, south point, 1; Anticosti, west point, 1; Anticosti, east point, 1; Anticosti, south-west point, 1; Belle Isle, west end, 2; Belle Isle, north end, 2; Bird Rocks, 1; Cape Bauld, 2; Cape Chatte, 1; Cape Despair, 1; Cape Gaspé, 1; Cape Magdalen, 2; Cape Norman, 2; Cape Ray, 2; Cape Rosiner, 1; Cape Etang du Nord, 1; Entry island, 1; Egg island, 1; Flowers island, 2; Fame Point, 2; Forteau, 2; Greenly island lighthouse, 2; Macquereau point lighthouse, 1; Martin river lighthouse, 2; Matane lighthouse, 1; Métis lighthouse, 1; Paspebiac lighthouse, 1; Perroquets lighthouse, 1; Plateau Rock lighthouse, 1; Points des Monts lighthouse, 1; Point Rich lighthouse, 2; Portneuf lighthouse, 2; Ste. Félicité lighthouse, 1; Seven islands lighthouse, 2; Bryon island lighthouse, 1.

October 30, 1907.—Gregory to deputy: Confirms following telegram:—'Only 50 Patton's fire extinguishers, not 142, received on May 8, 1905. Sending list by mail to-night where distributed.' List inclosed, as given on this sheet.

October 29, 1907.—Deputy to Gregory: Referring to your letter of October 15, 1906, relating to fire extinguishers, I have to inform you that in the last clause you promised to have a statement prepared by the inspector of lights as soon as possible showing how the fire extinguishers purchased in 1904-5 were distributed, and the statement forwarded to the department. A search has been made for the statement, but it does not appear to have reached the department. I have to request you to have it sent immediately or a copy of it. The Civil Service Commissioners are now looking into the matter at Ottawa and have requested the statement promised by you.

October 15, 1906.—Deputy said in letter to Gregory that 142 fire extinguishers were sent to Quebec in 1904 5 for use of agency lighthouses and Dominion steamers. Also a number stored in Montreal and are there still.

Blundering Correspondence.

September 21, 1906.—Gourdeau writes Gregory about account in connection with Governor General's trip on SS. *Minto,* in which a charge was made, apparently for wine, and which he was instructed to disallow as being contrary to previous instructions.

Gregory replied on September 24 that there was not a drop of wine put on board; that the expense was for wine glasses. Gourdeau replied, September 28, that explanation was satisfactory, and instructed him to forward original account for payment.

Gregory then writes, October 10, asking why F. T. Thomas & Co.'s account was reduced. Gourdeau replies, October 12: 'I beg to inclose herewith the account, and you will see that the reduction was made at your own office, for wine glasses.' Gregory replies, October 10, and refers him to his own letter of September 28, and to mine of September 29 returning the account as directed.

October 15, 1906.—Mailloux, accountant, at Quebec, writes to Boudreau, accountant's department: 'I beg to request that you will give me, as soon as possible, the information required by official letter to Col. Gourdeau, dated 10th ulto., copy inclosed, as it appears I cannot get this information in the regular way by the department.' On this letter was crossed in pencil: 'The information asked for was given some time ago. Please try to trace this letter on file.'

October 24.—Deputy writes that the accounts for which these cheques were issued were incurred by the steamer *Aberdeen* while in Quebec.

Quebec Agency purchasing unnecessarily expensive lumber—Resident Engineer says he is not responsible.

October 31, 1906.—B. H. Fraser writes P. E. Parent, resident engineer: 'I inclose herewith accounts from J. J. Murphy for materials for various stations below Quebec. You will please explain why such costly lumber has been ordered for these works, and whether cheaper material could not be obtained and would not be satisfactory.

November 1.—Parent replies: 'I have to state that these qualities were wanted, as the timber was wanted for windows, frames, doors, friezes, &c., and other furnishing material for dwellings. Naturally when timber or other construction material is required, an order is prepared and handed to the agent, who tells us where the timber is to be purchased, and the agent also looks after the cost of those materials. I cannot, therefore, answer for anything else but as to the goods received and the quality wanted.

Neglect and Delay.

November 8.—Gregory acknowledges receipt of your letter of September 17 last returning cheque No. A 2750, altered as requested by my letter of September 14. Letter and cheque referred to were only received at this agency yesterday (November 7).

Restrictions on Gregory.

November 17, 1906.—Long letter from Gregory in answer to instructions that no repairs to government vessels or plumbing be hereafter made unless the same have first been approved by Mr. Beauchemin, assistant to Inspector Schmidt; pretends to be well satisfied, but evidently is not.

Delay in paying crews.

December 4, 1906.—Gregory telegraphs: Captains Irvine, Christensen and Leblanc need badly balance due them to pay off their crews. When can they expect cheques? See statement 192, voucher 1332.

Purchasing chairs for 'Montcalm' without authority.

Memo. for Deputy Minister by A. W. O.: I attach an account received from the agent at Quebec, dated October 6, for five large Morris chairs covered in plush at $18 for the *Montcalm*. I do not see any authority given to the agent for this order. I am to request you to be good enough to initial the account for payment, if correct.

Written across this in red ink: These were purchased for the Governor General's trip. He afterwards decided to take the *Minto*. 8-12-06, F. G. (Account paid, December 10.)

Delay with pay-list.

April 23, 1907.—Gregory asks when he may expect a cheque in payment of pay-list of clerks of this agency from December 16 to 31, 1906?

Excessive delay in paying accounts.

April 26, 1907.—Gregory writes about an account, F. T. Thomas & Co., $75 for chimneys' supplies—August last forwarded in my statement 119 voucher 906, October 12, 1906. Your communication of October 26, 1906, states that the account in question will be paid.

Gregory suggests that Department should state what prices in S. & F.'s account should be reduced to.

May 10, 1907.—Letter from Gregory *re* Samson & Filion's accounts. I return herewith Samson & Filion's bills in order that you may put down opposite each item the price which is considered should be paid for such goods. I will then bring the matter up before Samson & Filion in such a manner as you may think proper.

Reply—May 15 (evidently by Stumbles) repudiated suggestion and suggested reduction of 25 per cent.

June 21-26, 1907.—Quebec agency bought Harvest Queen flour at $6.95, and Shamrock at $6.90. The market price for this flour at which it could have been bought in any quantity at that time was $4.50 per barrel.

Chief Engineer objects to unneeded repairs.

July 31, 1907.—Anderson, chief engineer, asks Gregory for explanation of repairs to Prince Shoal lightship when Schmidt had reported no repairs would be required. $172.71, F. X. Drolet. Also $305.90, F. X. Drolet, for repairs to Red Island lightship when same report was made by Schmidt.

Samson & Filion's excessive prices—Agent must make the best of it, although Department convinced that they are unjustifiable.

July 25, 1907.—Deputy writes to Gregory: In reply to your letter 22nd instant, in which you state that S. & F. want their account paid ($1,085.54) and stating that the department reflects upon their reputation as merchants, I have to inform you that there was no reflection upon their reputation in any way or form. The department took steps to compare the prices for the same articles with the prices paid at Sorel, and the difficulty to a large extent rests on the fact that you certified their account at high prices. Under these circumstances, there is no other course to follow than for you to make the best arrangement you can with this company. The department is quite satisfied that the prices are not what is called reasonable and fair for the goods, compared with the goods purchased in other cities. I would like very much to have the matter settled as amicably as possible, but I cannot overlook facts that have been brought to my attention, and which I have gone to great trouble to rectify (verify).

Samson & Filion take no backwater.

August 3, 1907.—Letter from Samson & Filion: Having looked over our prices on manilla rope charged on the account of C.G.S. *Champlain*, we have to notify you that the price is correct. This rope is the purest manilla, and manufactured expressly to fill orders as given to us by Captain McGough. On packing, the prices are charged accordingly with the quantity chosen. Our globes and paint prices are charged accordingly with the quantity ordered.

(Subject reported on by Desbarats, Sorel, February 4, 1907.) See his report attached.

July 5, 1907.—Gregory's reply to letter from department asking what authority he had for making such large purchases without the sanction of the department, reference being particularly to supplies for Belle Isle, Seven Islands, Prince Shoal, Red Island and White Island lightships.—2 pages.

Only one flour dealer on patronage list.

September 5, 1907.—Letter from Gregory, 4 pages, in reply to department's letter of September 4, *re* accounts of F. X. Gagnon and Samson & Filion, complaining again of excessive prices—in which he explains in extenuation of the prices paid for flour that there is only one flour dealer on his patronage list. See typewritten letter attached, dated September 5, 1907.

Fresh restrictions on Gregory.

September 6, 1907.—Letter to Gregory giving new instructions with regard to bank account. The department requires that in future a copy of the storeman's or yardman's receipt for material and supplies be pasted to the back of the bills to which they apply, and thus forwarded to Ottawa. The same practice should be followed in connection with any bills paid at the agency. It is further required that the purchase order number appear on every bill, and the name of the person authorizing the purchase.

September 11, 1907.—Letter from acting chief engineer to resident engineer, Quebec, asking for information about two accounts for materials charged to construction.—No answer.

High-priced articles for SS. 'Champlain' ordered by Captain McGough.

September 24, 1907.—Memorandum about Samson & Filion's account goods supplied *Champlain*. Captain McGough being asked what quality of goods he had ordered replied that he had ordered the 'best,' as he considered the very trying work of the *Champlain* in winter required the very best. This being the case, I am of the opinion that Captain McGough is responsible for ordering so much high priced articles. The conclusion was that a deduction of 25 per cent should be made.

Memorandum for Deputy Minister: Dominion steamer inventories—March 5, 1906.

Construction material in store.
Maintenance material in store.
Druid—ship supplies, silverware, crockery &c., on board (2 sheets).
Aberdeen—ship supplies, silverware, crockery, &c., on board (7 sheets).
Montcalm—ship supplies, silverware, crockery, &c., on board (10 sheets).
Champlain—ship supplies, silverware, crockery, &c., on board (8 sheets).
Maintenance (4 sheets).
Construction (1 sheet).
Inentory of gas buoys, sinkers, &c. (1 sheet).

Improvident purchasing.

The maintenance stock is fairly large, although nearly everything is also purchased in retail.

I beg to say that Mr. O'Farrell, Superintendent of Lights, keeps his books very well, that he makes an inventory every fall of what is left with each lighthouse keeper, besides of what he has in stock; and this enables him to check the expenditure of his men.

Evidently no proper storekeeping—No efficient check of stores—Great Saving might be effected by prudent wholesale purchases and by having Department's own shops properly equipped to do its own repairs.

The only improvement I could suggest would be to appoint a storekeeper and not let anything go out of the store unless a requisition is signed by the agent. As it is at present the maintenance and construction materials are in the same building and the men in the shop can go and take what they need for their work, indiscriminately from one or the other, regardless of what it is for. I may also add that if you had a good storekeeper, articles which are often required could be purchased wholesale, instead of retail; and thus a considerable saving could be effected. A saving of 8 or $10,000 a year could be made. I think it would also be advantageous to have the shops better equipped, so as to be able to make repairs to machinery of the steamers, &c. Now, we have to go to F. X. Drolet or someone else for every little repair. From July 1 to this date we have already paid $59,131.66 to Mr. Drolet alone for repairs of all kinds, and we still have four months to run to end of fiscal year.

While I was in Quebec a circular was issued to all the merchants, &c., on the patronage list to forward their accounts monthly. This will enable the department to control the appropriations better.

A file is prepared on which yearly inventories of all stores owned by the department will be placed, and this will enable the officers in charge of the different votes to control more effectively the purchases. Circulars are being issued to agencies, &c., to forward copies of their inventories to the department and I would suggest that they be prepared either during December or January.

September 10, 1906.—Inventory of deck stores—Engineers and Stewards Departments:—

C.G.S. *Stanley*, J. B. Ferguson, chief engineer, 7 sheets.
C.G.S. *Minto*, J. S. Ferguson, chief engineer, 2 sheets.
C.G.S. *Aberdeen*, W. M. Stewart, chief engineer, 6 sheets.

Coal Contract for Prescott Agency.

September 13, 1907.—Letter from Jas. Buckly, Prescott, complaining that his contract to supply anthracite coal for depot there for one or three years involved a loss to him of 50 cents a ton. Contract price was $5.75 and cost price $6.25. Begs for consideration. I am willing to continue the furnishing of the coal under the circumstances at cost price—say $6.25 per ton.

Memorandum for Deputy Minister thereanent.—September 17, 1907.—(By W. W. S.): I recommend that Mr. Buckly's offer be accepted, and as he has furnished coal at a loss in the past, that 5 per cent profit be allowed him for coal in future. Anthracite coal in Ottawa costs from $7.25 to $7.75 and the regular price at Prescott is $7 per ton.

GOVERNMENT SHIPYARD,
SOREL, February 4, 1907.

Lt.-Col. F. GOURDEAU,
Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I am in receipt of your letter sending me unofficially a number of accounts for supplies for the steamer *Champlain*, and asking me to give my opinion on the prices charged.

It is evident that all this material has been bought at retail over the counter, and full retail prices charged. On a number of items, I am unable to form any judgment, as sufficient detail is not given in the accounts. I find, however, that as a rule, the prices are a shade higher than those which prevail in the retail stores at Sorel, and are generally about 50 per cent higher than the prices which we pay at the Sorel shipyard. In a few cases the difference amounts to 100 per cent. On the item of washing soda, we pay 85 cents per 100 pounds; the Quebec charge is $3. It can be bought in Sorel for $1.50.

For parafine candles we pay 9 cents; the Sorel retail price is 15 cents, and the Quebec price is 20 cents.

The cold-blast lanterns, we pay $4.50 per dozen; the Sorel retail price is $7.50, and the Quebec price is $9.

On Comfort soap we pay $3.65 per case, the Sorel retail price is $4.25, and the Quebec price is $5.

On parlour matches we pay $4.50 per case, buying them at retail at Sorel; the Quebec price is $5.

I append a comparative statement of the prices which we pay at the Sorel shipyard and the prices charged by Samson & Filion. Where their prices are not more than 50 per cent higher than our wholesale prices, I would consider their charges fair, but where they go beyond that, there was an over-charge, which might be due to some special circumstances, but which would call for an explanation.

On heavy material, such as rope, steel, iron, white lead, &c., the margin should be very much smaller than 50 per cent, and on these items, I find Samson & Filion's

prices quite fair. In stating that prices are fair, I am considering them as retail prices for small quantities.

As to your question about the paint, there is no doubt that paint could be mixed on board at a much smaller cost than that of the ready-made paint, but it requires a good man to mix paint well. We buy small quantities of Sherwin-Williams paint for special uses, but as a rule we mix our own paint

Yours obediently,

G. J. DESBARATS,
Director of Shipyard.

COMPARATIVE STATEMENT of prices paid to Samson & Filion, Quebec, and prices paid by Government Ship Yard, Sorel.

—	Samson & Filion	Govt. Ship Yard.
	$ cts.	$ cts.
Pure manilla rope, ⅝ pr. lb	0 18	0 14½
Galv. patent shackles, 1-in., each	1 25	0 67
Galv. patent shackles, 1¼-in., each	1 50	1 40
Steel wire rope, ¾ pr. ft	0 15	0 10¾
Manilla rope sisal, 1½ pr. lb	0 15	0 11½
Lantern globes, pr. doz	1 20	0 75
Steel plates, pr. 100 lbs	3 00	1 80
Bar iron, pr. 100 lbs	2 20	2 15
Split pins, 2½ x ¼ or cotter pins, pr. 100 lbs	0 50	0 28
Galvanized iron, No. 28, pr. 100 lbs	5 00	4 50
Galvd. nails pr. lb	0 15	0 07
1 pt. can oil glue, per case	0 50	0 33½
Brass screw, 1-in x 14-in. pr. gross	1 40	1 00
Brass screw, ¾-in. x 6 in., gross	0 80	0 50
Hammer handles, pr. doz	1 35	0 89
Marine black paint, pr. gall	2 00	1 40
Aluminum paint, pr. gall	4 50	4 50
White enamelled, pr. gall	3 00	2 00
Grey enamelled, pr. gall	3 00	2 00
Pure white lead, pr. 100 lbs	7 00	6 25
French green imperial, pr. lb	0 20	0 16
Turpentine, pr. gall	1 15	0 95
Smoke stack, pr. gall	2 00	1 20
Red hand lantern globes, pr. doz	3 75	3 60
Lamp chimneys, pr. doz	1 20	0 75
Washing soda, pr. 100 lbs	3 00	0 85
Soft soap, pr. 100 lbs	10 00	5 00
Cotton waste, pr. lb	0 10	0 09½
Deck brushes with rubber back, pr. doz	7 00	4 50
Scrubbing brushes, pr. doz	3 50	1 75
Corn brooms, per doz	3 50	2 40
Coal shovels, pr. dozen	15 00	9 90
Pick handles, pr. doz	2 50	2 00
Candles, parafine, pr. lb	0 20	0 09
Copper wire, pr. lb	0 40	0 27
Cold blast lanterns, pr. doz	9 00	4 50
Burners, pr. doz	1 50	1 00
Sheet copper, pr. lb	0 40	0 30
Sunlight soap, pr. case	5 00	3 75
Parlor matches, pr. case	5 00	4 50
Red lead in powder, pr. lb	0 08	0 05¾
Whiting, pr. lb	0 02	0 01
Duck packing, pr. lb	0 60	0 40½
Metallic asbestos, pr. lb	1 50	0 83
Pure red rubber packing wire ins., pr. lb	1 40	0 65
Glass gauge washers, pr. doz	0 60	0 15
Tube cleaners, 3-in., each	2 50	2 10
Comfort soap, pr. case	5 00	3 65
Emery cloth, pr. doz	0 45	0 20
Sheet brass, pr. lb	0 40	0 30
Plumbago, pr. lb	0 40	0 30
Ingot tin, pr. lb	0 50	0 45
Hack saw blades, pr. doz	1 80	1 25

O. G. S. CHAMPLAIN, QUEBEC, JUNE 1, 1907, MARINE DEPARTMENT, ACHETE DE SAMSON & FILION.

—	——	$ cts.	$ cts.
May 26.	C. G. S. CHAMPLAIN, ENGINE.		
Ordre 4881..	40 lbs. square duck packing, 1-in	0 60	24 00
	40 " " " ⅞-in	0 60	24 00
	40 " " " ¾-in	0 60	24 00
	30 " " " ⅝-in	0 60	18 00
	25 " " " ½-in	0 60	15 00
	15 " " " ¼-in	0 60	9 00
	40 " round " 1-in	0 60	24 00
	40 " " " ⅞-in	0 60	21 00
	40 " " " ¾-in	0 60	24 00
	30 " " " ⅝-in	0 60	18 00
	25 " " " ½-in	0 60	15 00
	15 " " " ¼-in	0 60	9 00
	18 " 2 boxes Garlock packing, 1-in	1 00	18 00
	10½ " 2 " " " ¾-in	1 00	10 50
	7½ " 2 " " " ⅝-in	1 00	7 25
	7¾ " 3 " " " ½-in	1 00	7 75
	3⅛ " 3 " " " ¼-in	1 00	3 13
	1½ " 3 " " " 3/16-in	1 00	1 50
	5¼ " 3 " " " ⅜-in	1 00	5 25
Ordre 4882..	27½ " 3 " square flax " 1-in	0 60	16 50
	19¼ " 3 " " " ⅞-in	0 60	11 55
	11⅞ " 3 " " " ⅝-in	0 60	7 05
	15½ " 3 " " " ¾-in	0 60	9 30
	5¾ " 2 " " " ½-in	0 60	3 45
	15½ " 2 " Metalbestos blras packing, ¾-in	2 50	38 75
	40 " 5 doz. asbestos cord	0 40	16 00
	50 " asbestos tape, ⅛-in	1 00	50 00
	10 doz. cotton wick bale	1 20	12 00
	1 gross lamp wick, No. 1	.....	1 20
	1 " " No. 2	.....	1 20
	8 doz. lantern chimneys C.B	1 20	9 60
	1 " corn brooms	.....	3 50
	1 " little "	.....	1 80
	6 scrubbing brushes, rubber back	0 50	3 00
	1 doz. tube steel cleaners, 3-in	.....	30 00
	6 firing shovels	1 10	6 60
	2 gross emery cloth	5 40	10 80
	3 " matches, silent	4 50	13 50
	18 manhole door joints	2 00	36 00
			563 18

Articles received, examined and found correct by

H. J. McGOUGH,
Master.

I certify that the above was duly authorized and that prices charged are fair an just.

J. U. GREGORY,
Agent.

QUEBEC, JUNE 1, 1907, MARINE DEPARTMENT, ACHETE DE SAMSON & FILION.

—	—	$ cts.	$ cts.
May 27.	C. G. S. CHAMPLAIN, ENGINE.		
Ordre 4883..	3 dust pans	0 20	0 60
	6 cold blast lanterns	0 75	4 50
	27 lbs., 2 yards, rainbow packing, ⅛-in	1 00	27 00
	14 " 2 " " 1/16-in	1 00	14 00
	13 lbs., 2 yards, trade rubber	0 40	5 20
	1 doz. ass. files	.....	3 50
	1 " "	.....	6 00
	1 " "	.....	6 68
	1 set tap and die for bolts, ⅛ x ¾-in	.....	15 00
	15 lbs. ass. washers	0 10	1 50
	15 doz. machine bolts	0 35	5 25
	1 " ass. paint brushes	.....	7 35
	50 lbs. tallow	0 15	7 50
	6 file handles	0 10	0 60
	3 file brushes	0 22	0 66
	17 feet 1 bar galv. pipe, ⅜-in	0 04	0 68
	16′ 3″ 1 bar galv. pipe, ½-in	0 05	0 82
	17′ 2″ 1 " " ¾-in	0 05½	0 95
	29′ 6″ 1 " " 1-in	0 08	1 64
	39′ 0″ 3 bars " 1¼-in	0 10	3 90
	5 lbs. 1 bar round iron, ⅜-in	0 03	0 15
	17 " 1 " " ⅜-in	2 30	0 39
	8 " 1 " " ½-in	2 40	0 19
	2 " 1 " " ¾-in	2 85	0 06
	25 " 1 " " ¾-in	2 25	0 57
	47 " 1 " " 1-in	2 25	1 06
	3 doz. ass. pipe fitting	3 64	10 92
	1 Jenkins globe valve, ½-in	.....	1 20
	1 " " ¾-in	.....	1 65
	1 " " 1-in	.....	2 10
	2 " " 1¼-in	3 00	6 00
	1 " " 1½-in	.....	4 13
	2 doz. Jenkins valve dish	2 40	4 80
	5 doz. glass gauge rubber	0 60	3 00
Ordre 4888..	3 boxes Sunlight soap	5 00	15 00
	203′ 2″ 10 bars galv. pipe, 2-in	0 16	32 50
	1 doz. ass. galv. fitting	.....	3 74
	100 lbs. cup grease	0 20	20 00
	6 doz. sweet rag	2 40	14 00
Ordre 8896..	2 salometers	1 75	3 50
	2 thermometers	3 50	7 00
	6¾ lbs. solder	0 55	3 71
	2 boxes soldering paste	0 50	1 00
			251 40

Articles received, examined and found correct by

H. J. McGOUGH,
Master.

I certify that the above was duly authorized and that prices charged are fair and just.

J. U. GREGORY,
Agent.

QUEBEC, June 18, 1907.

Lt.-Col. F. GOURDEAU,
Deputy Minister, Marine and Fisheries,
Ottawa.

SIR,—I have the honour to acknowledge receipt of your letter of the 17th instant returning Mr. Raoul R. Bergevin's account against the C.G.S. *Eureka*, and requesting me to inform you of the reason why such a large quantity of carpet was used on board this vessel.

I beg respectfully to state that by your communication of the 26th March last, No. 26336, you appeared to place this matter very much in the hands of Mr. Larochelle, President of the Corporation of Pilots, who directed the captain and steward to obtain what was necessary to fit the boat out for the service; the consequence was that he ordered from Mr. Bergevin what appeared to be required. For the quantity obtained the carpet and oilcloth appear to be at a reasonable price, and the boat undergoing a thorough outfitting appeared also to need all that was purchased. You will please bear in mind that there were many changes made to the *Eureka*, and really I am not aware that anything more than was required was given to the vessel.

Respectfully submitted.

J. U. GREGORY,
Agent, Dept. Marine and Fisheries.

OTTAWA, June 26, 1907.

The AGENT,
Dept. Marine and Fisheries,
Quebec, P.Q.

SIR,—The department is in receipt of accounts from J. B. Côté and W. R. Blakiston, amounting to $971.60 and $271.90, respectively, for supplies to Belle Isle, Seven Islands, Prince Shoal lightship, Red Island lightship and White Island lightship, the total amounting to $1,243.50, forwarded with statement No. 131, and before payment of the accounts is considered I am to request you to inform me if instructions were received from the department to make these large purchases. According to the orders given by the minister, no large purchases were to be made without first having received the sanction of the department.

In this connection I may say that it is impossible to control the appropriation when large amounts are expended at the agencies without any knowledge of the same being noted, and the minister has already intimated that he will not ask parliament for any supplementary vote for maintenance of lights if the appropriation is expended before the close of the fiscal year. I may say that a particular statement of all unauthorized expenditure is kept to present to the minister on his return from Europe.

Your obedient servant,

C. STANTON,
for Deputy Minister Marine and Fisheries.

QUEBEC, July 5, 1907.

Lt.-Col. F. GOURDEAU,
Deputy Minister, Marine and Fisheries,
Ottawa.

SIR,—I have the honour to acknowledge receipt of your letter of the 26th ultimo, No. 26239, requesting me to inform you if instructions were received from the department to make large purchases, and that according to the orders of the minister, no large purchases were to be made without first having received the sanction of the

department, these remarks referring to a statement involving accounts, to the amount of $1,243.50, from Messrs. J. R. Côté and W. R. Blakiston, for supplies for Belle Isle, Seven Islands, Prince Shoal lightship, Red Island lightship and White Island lightship.

I beg, respectfully, to state that I considered myself fully authorized to incur such expenditures, particularly as regards Belle Isle, Seven Islands and general purchasing of tanks, &c. (and beg to refer you to departmental correspondence on these subjects), so that we might be ready for the opening of navigation in the urgent and positive interest of the public service. I cannot see how my action will, in any way, cause the expenditure of this agency to overrun the amount asked to carry on the service, as I have every reason to believe that we will be considerably within my estimates, unless some extraordinary service is performed by the vessels under the control of this agency, such as has occurred sometimes and which could not be foreseen. The orders to carry on the work by Mr. Blakiston were issued by Captain Koenig, inspector of lights, and were all represented as being necessary to outfit the lightships for the services they had to perform very shortly afterwards.

The account of Mr. J. B. Cote for parts, tanks, &c., is also for the outfitting of the lighthouse service and fully authorized. These general supplies for outfitting lighthouses, lightships, &c., have never been questioned before and are absolutely necessary, and I do not know how to run this agency without providing for them at the proper time, and no one else can do so.

Please bear in mind that there is a yearly large increase in the number of lights and fog-alarms established in this agency, and every one of them requires equipment, and advantage must be taken of any opportunity to have the goods delivered in time by such means as are available. I surely will not exceed the amount asked to carry on the services of this agency, and even if it were slightly exceeded, it would not be due to me but to the increased requirements unforeseen by me when the estimates were made out.

It would appear, by our triplicate copy, that the endorsement on the account of Mr. J. B. Cote is not for the west end of Belle Isle, but for the northeast end. Please correct the original and duplicate copies sent to the department accordingly.

I trust that these explanations will be satisfactory.

Your obedient servant,

J. U. GREGORY,
Agent, Department of Marine and Fisheries.

OTTAWA, July 10, 1907.

ALFRED LAROCHELLE, Esq.,
President Corporation of Pilots,
Quebec, P.Q.

SIR,—I am to inform you that I am in receipt of an account furnished by Raoul R. Bergevin, amounting to the sum of $373.70, for carpets, oilcloth, bedding and kitchen utensils for the ss. *Eureka*. The account shows that 125 yards of carpet and 52 yards of oilcloth were purchased, and this appears to be a very large quantity for such a small vessel. I may state that the appropriation for administration of pilotage voted by parliament will not stand such large expenditures.

The agent of the department at Quebec, Mr. Gregory, states that the furnishings of the steamer were ordered by you, and I am to request you to inform me why it was necessary to furnish the vessel so lavishly and why such large quantities were required for such a small vessel.

Your obedient servant,

F. GOURDEAU,
Deputy Minister Marine and Fisheries.

Letter from Gregory as to this matter, dated 18th June in which he says the department placed it very much in the hands of Larochelle.

QUEBEC, July 11, 1907.

C. STANTON, Esq.,

For Deputy Minister Marine and Fisheries.

DEAR SIR.—Referring to No. 27999, I have signed the requisition of Capt. Lavoie, of *Eureka*. As she was overhall fore and aft in the dock every things on board was distroyed and she was to be refitted anew and all articles signed by me were useful for carpets oilcloth bedding a dozen beds for Pilots and the rest for the crew. I have been on board myself and I don't see any things lavishly, as for kitchen utensils and victuals I never had anything to do with it.

Your obedient servant,

ALFRED LAROCHELLE,
Superintendent of Quebec Pilots.

26913.

(Memo. for Deputy Minister.)

I have an account of Samson & Filion, Quebec, for packing for the steamer *Champlain*, amounting to the sum of $562.18. It appears to me that the quantity and the price charged for this packing is very excessive. There is a charge also for 50 pounds of tallow at 15 cents a pound. I just found out from Matthews & Co. by 'phone that they can supply any quantity of tallow at 9 cents a pound. In that case Messrs. Samson & Filion are making a good profit on the tallow. The prices charged and certified to by the agent, Quebec, are so excessive that I do not feel like issuing a cheque without receiving further instructions. This tallow is based on the price of beefsteak.

A. W. OWEN,
Accountant.

OTTAWA, August 21, 1907.

ACCOUNTANT.—This should be carefully looked into.—F. G.

27999.

OTTAWA, September 4, 1907.

The AGENT,
Dept. Marine and Fisheries,
Quebec, P.Q.

SIR,—I notice an account received in your statement No. 275, rendered by F. X. Gagnon for supplies for Cape Norman, in which there is a charge of $24 a barrel for pork, while an account received from Halifax shows that the best pork can be purchased at $17.50 a barrel.

With regard to flour, I may say that the best flour is charged at $5.20 per barrel in Halifax, while accounts from Quebec charge $6.95. Why is there such a difference between Quebec and Halifax when the freight rates to Halifax are higher than to Quebec?

There is an account rendered by Samson & Filion, statement No. 267, in which lard is charged at 15c. a lb. when the same article can be supplied in large quantities in Ottawa and Montreal at 9c. per lb. For small quantities F. X. Gagnon charges 12c. per lb., while Samson & Filion charge 15c.

Samson & Filion have rendered an account amounting to $563.18 for packing for the *Champlain*, and the department considers the amount and price charged very excessive.

These differences in prices cause the minister a great deal of trouble in the Public Accounts Committee, when he depends upon his officers to purchase goods at the very lowest rate. An explanation is required before payment of the accounts is considered.

Your obedient servant,

F. GOURDEAU,
Deputy Minister Marine and Fisheries.

QUEBEC, September 5, 1907.

LT.-COL. GOURDEAU,
Deputy Minister Marine and Fisheries,
Ottawa.

SIR,—Referring to your letters of the 3rd and 4th instant, No. 27999, in which you state that the differences in prices between Quebec, Halifax, &c., cause the minister a great deal of trouble in the Public Accounts Committee, when he depends upon his officers to purchase goods at the very lowest rate, and that an explanation is required before payment of the accounts is considered.

I beg to note the contents of your letters.

1. In statement No. 275, rendered by Mr. F. X. Gagnon, for supplies for Cape Norman, a charge of $24 for a barrel for pork, while an account received from Halifax shows that the best pork can be purchased there for $17.50 per barrel. I beg respectfully to state that the prices for the best province of Quebec mess pork, for family use, packed in Quebec, such as we always use, is now and has been at the rate of $24 to $25 per barrel and no less. The Chicago pork, which is not considered as profitable, has been sold and is now being sold, in this market, at $22 to $23 a barrel, and there has always been and there is yet a difference of $2 or $3 a barrel between Chicago pork and province of Quebec pork, the latter is the cheaper at the higher rate. As to the best pork being purchased at $17.50 a barrel, it would decidedly pay the department if they can get as good pork at Halifax for $17.50 as we pay $24 for, to buy the pork and bring it up here for the use of the steamers. I cannot do it, purchasing the same from friends of the administration or outsiders. There are several grades of pork, some barrels contain a portion of heads and feet and is thin pork and often called 'prime' pork. I have no doubt I can get such pork as that for $17 to $18 a barrel, but it is not suitable for our use.

2. The prices of 'Harvest Queen' and 'Shamrock' brand flours per barrel are $6.95 for the former and $6.90 for the latter. These are Messrs. E. M. Lennon & Co.'s prices and the same prices are charged by every flour dealer in Quebec for the same brands of flour. These brands cannot be bought for less here. If as good flour can be bought in Halifax for $5.20 per barrel, it would pay the department to import it from there. There are other brands of good family flour that can be bought in this market from Messrs. E. M. Lennon & Co. and others, at $6 upwards, but not less than $6, suitable for our purposes. Our people generally choose the best, for the reason that it is subject to changes of temperature, which might cause it to harden or sour, as has often occurred with ordinary flour.

3. As to the account of Messrs. Samson & Filion, I beg respectfully to remark that I do not know of any lard having been bought from that firm, at any price. I understood that a special quality of tallow was bought and selected by the engineers for the machinery of the C.G.S. *Champlain*. When I purchase tallow for the steamers, I get it from Mr. Jean Drolet, butcher, and allow 9 cents a pound for it, and no more. Messrs. Samson & Filion are very heavy dealers in the goods they sell. The Militia Department and the Department of Public Works purchase from that firm and appear satisfied of the manner in which they deal with them; they keep goods of several grades; we generally get the best, especially for our vessels running in salt water.

As to the balance of the bill of $563.18, packing, cotton wick, lamp wick, lanterns, chimneys, brooms, scrubbing brushes, tube cleaners, firing shovels, emery cloth, matches, manhold joints, door joints, &c., this large bill was made on account of the *Champlain* being away from Quebec the whole season, and, as customary, a large stock was supplied for the vessel before she left to go away from the source of supplies. If you will please notice, in Samson & Filion's accounts, as well as many others, you will find that we have marked off in red reductions we have made in prices charged, but occasionally an item may escape us and I shall always be thankful for the department bringing the fact to my notice in time so that I may make the correction.

Referring to the matter of flour, there is but one flour dealer on the patronage list. I beg respectfully to suggest that you place one or two more on the list of such dealers.

As to the tallow, I shall make it a point to inquire again why the engineer of the *Champlain* required a special kind of tallow. There may be a reason for this extra charge, as there has been reasons for soft soap being bought at 2 cents per pound and being bought at 10 cents per pound. It is all called soft soap, but there is a vast difference in its component parts.

Now, before writing this answer to your letter, I beg to state that I have made inquiries among the dealers in flour, pork, and all the other articles mentioned, not only among the friends of the administration but outsiders also, and the prices quoted are Quebec prices, and these prices, by tender as far as possible, were obtained from dealers in Quebec, friends of the administration, and submitted for your approval, by my letter of the 18th March ,1907. The same kind of correspondence has been carried on between this agency and every administration I have served under, whether Liberal or Conservative, before and since confederation. I have more than once stated that if lower prices were wanted to throw the supplying of goods open to public tender and you will get low prices, for I have no doubt that there are people in this market, on either side of politics, as the case might be, who will put their prices down very low, simply to take the patronage away from the others, and such offers have been made to me more than once.

Respectfully submitted,

J. U. GREGORY,

Agent, Department of Marine and Fisheries.

MORIN SHOAL—LIGHTHOUSE COMMISSIONERS' BOARD—LIGHTHOUSE BOAD MINUTES.

MORIN SHOAL.

Shoal discovered.

File 21159. $\frac{11785}{26283}$

November 12, 1904.—Shipping Federation (Thos. Robb, manager) beg to acknowledge receipt of your telegram of even date notifying us that your engineers had discovered a dangerous obstruction directly in the channel opposite Murray Bay. Immediately on receipt of your telegram, our respective members were notified by circular letter.

November 15.—H. & A. Allan, telegraph deputy: 'Kindly ascertain and advise us crossbearings of shoal which has been discovered lately obstructing channel opposite Murray Bay. This information is necessary for safe navigation of channel.'

Deputy telegraphs F. W. Cowie to ascertain and advise H. & A. Allan of said crossbearings.

Spar Buoy placed

November 12.—Gregory asks deputy to inform shipping authorities that I despatched *La Canadienne* this afternoon to place a horizontal striped black and red spar buoy over the patch discovered nearly opposite Murray Bay, as per information given by Mr. Cowie. This buoy will be put in position to-morrow morning at daylight.

November 14.—Gregory advises deputy that the spar buoy has been placed. Bearings and particulars will be supplied by Cowie. In connection with the matter it appears that a gas buoy will be required for next season. As we have now no spare gas buoys on hand, I would respectfully suggest 3 or 4 new gas buoys be provided for this agency. (Marked: 'Provision made 1/1/05. J.F.F.')

Mr. Cowie.

November 15.—Thos. Robb, of Shipping Federation to Deputy Minister. In further reference to your telegram of 12th inst., *re* a dangerous obstruction directly in channel opposite Murray Bay. 'The Executive Council of this Federation desire me to thank you for the prompt measures taken by you in locating as well as marking this spot with barrel buoys, and at the same time my executive desire me to urge you to take the necessary steps with a view of removing this obstruction, so that the channel may be clear when navigation opens next season. Trusting you will give this matter your immediate attention, I have the honour to be,—T. Robb.'

H. & A. Allan and Shipping Federation.

November 18.—H. & A. Allan write to W. L. Magee, Acting Deputy Minister: Owing to yesterday being a holiday, we did not advise you that we had received from Mr. Cowie a chart showing the position of the obstruction to navigation in the channel off Murray Bay, and Capt. Vipond of our ss. *Tunisian* took the crossbearings from the chart and communicated the information to the other masters of our fleet, and we in turn have passed on the information to the other lines here through the Shipping Federation.

November 16.—H. & A. Allan write deputy minister: We beg to acknowle receipt of your telegram of the 14th inst. Mr. Cowie has never communicated w us, and as the *Tunisian* sails hence at 9 a.m. on Friday next, it is of the utm importance that we should be advised of the exact location of the obstruction in channel off Murray Bay. Will you please ask him to wire us as soon as possible?

November 19.—A notice to mariners required respecting buoy off new shoal op site Murray Bay. Get particulars through Stewart from Cowie. I saw Mr. Co and he promised me this at once.—W.P.A.

November 18.—W. L. Magee, for deputy minister, wires to Cowie, at So Furnish the Allans, Montreal, by telegram immediately with information requi in my telegram to you, 15th inst. : *Tunisian* ss. sailing this a.m.

November 18.—W. L. Magee to Allans, Montreal: Have telegraphed Cowie day to furnish you immediately by wire information required for ss. *Tunisian*.

November 18.—M. C. Blais wires to W. L. Magee (from Sorel): Telegram Cowie received two hours after he had left for Montreal. Have wired Mr. Allan watch his arrival for information wanted.

November 18.—Allan wires to Magee, viz.: Received information required c cerning obstruction off Murray Bay from Cowie yesterday.

November 18.—F. W. Cowie writes to deputy minister, from Sorel, viz.: In re to yours of the 15th inst., stating that you had wired me to send to the Allans, Montreal, the location of the 'Morin shoal,' lately discovered opposite Murray B and asking to report to the department the substance of my reply, I beg to give a copy of the letter sent, as follows:—

'Messrs. H. & A. ALLAN,—I am instructed by Colonel Gourdeau, Deputy M ister, to furnish you with the bearings of the shoal, which we have called 'Morin Sho discovered last week in the River St. Lawrence ship channel below Quebec.

'It was too late to place a gas buoy this season, but Mr. Forneret placed Sunday last a red and black spar buoy to mark the shoal.

'As it is difficult to give you the information otherwise, I am sending by exp my own copy of the chart from which you may locate the shoal on your charts, return it to me at your convenience.

'I understand that President Morin, who was with us when making the inve gation, has notified all the Quebec pilots.'

November 17.—H. & A. Allan write to Cowie, acknowledging receipt of his le of 15th instant.

Thos. Robb asks for Information.

November 29.—Thos. Robb writes the deputy minister with further reference dangerous obstruction in the channel opposite Murray Bay: 'My executive desire to ask if the department would favour them with copies of any reports they may h had from any of the pilots regarding this shoal.

'I may say that at our last meeting, it was suggested that there is part of a s merged wreck of a vessel that was laden with oak and took fire there some years a Trusting to be favoured with this information.'

Deputy to Robb, Shipping Federation.

December 1.—W. L. Magee, for deputy minister, writes to Robb (Shipp Federation), viz.: I beg to acknowledge receipt of yours of the 29th ult., asking copies of any reports the department has received from any of the pilots regard 'Morin shoal' in the River St. Lawrence, opposite Murray Bay, and to state in re that the matter is being referred to the superintending engineer of the River

Lawrence channel, with a view to furnishing you with any information that is on file in regard to the subject.

A note has also been made of the recommendation contained in yours of the 15th ult., that the necessary steps be taken to remove this shoal, so that the channel may be clear when navigation opens next season.

Copy of Robb's Letter sent F. W. Cowie.

December 1.—W. L. Magee writes to Cowie, transmitting copy of above letter of Robb (Shipping Federation) and asking him to furnish any such reports he may have. What is your opinion regarding this shoal being part of a submerged wreck? The Shipping Federation, in a letter dated November 15, recommend that the necessary steps be taken to remove this obstruction, so that the channel may be clear when navigation opens next season.

C.P.R. Steamer Manager writes Minister on Matter.

November 30.—A. Piers, C.P.R. SS. lines, writes the minister, viz.: 'With reference to my communication of the 15th September, in which I called attention to an obstruction which was struck by the ss. *Montcalm* in the navigable channel between Cape Goose and Cape Salmon on the 10th September last.

'I shall be glad if you will let me know what steps have been taken to locate and remove this obstruction, so that I may properly advise the masters of our ships which will be coming to this port next season.

'I need hardly call your attention to the urgency of this matter, as you are already aware that this obstruction has been struck several times in the past eight years.

Minister's Reply.

December 5.—Unsigned letter (copy), headed, Office of the Minister of Marine—to A. Piers, manager of C.P.R. SS., thus: 'Owing to my absence from the city, your letter of the 30th November is just to hand, regarding an obstruction between Cape Goose and Cape Salmon. I will refer this matter to my officers for a report and will communicate to you.'

Quebec Pilot's Evidence.

Copy of a letter dated September 14, from F. X. Dion, Secretary of the Quebec Pilots, reporting that on the 10th inst. (September) E. Larochelle, pilot, being in charge of the ss. *Montcalm*, believes to have touched what is supposed to be Morin shoal, and same thing happened on two different occasions, 1st in 1893, and 2nd again, August 14, this year (1904).

F. W. Cowie's Report for Minister's Information, 6/12/04.

December 6.—F. W. Cowie writes deputy acknowledging receipt of his letter of 1st inst., thus: According to your instructions, I beg to enclose a copy of the translated report from the secretary-treasurer of the Quebec Pilots, on which the examination was ordered to be made.

With reference to the question of this shoal being part of a submerged wreck or caused by such an obstacle, I beg to say that in my opinion it is simply a continuation of the formation of shoals and islands which occur in the middle of the River St. Lawrence below Quebec, and not caused by any silting around a submerged wreck. The engineers who made the examination reported that in the limited time which they had at their disposal, they defined the shoal to be at least three-quarters of a mile long, and the bottom fairly hard.

(Minister wishes this to be brought before Lighthouse Board.)

As this obstruction is in the direct course of steamers, steps will require to b taken to have it safely and distinctly marked by a gas buoy. There being deep wate on either side, it will be quite unnecessary to remove this shoal, if it can be properl marked, so as to be avoided by vessels by passing on either hand.

(Passed upon by Lighthouse Board, 31/3/'06.)

The existence of this shoal in the direct track of ships for many years, with depth of only 20 feet at low water where the chart shows over 66 feet, shows th absolute necessity of a new organization below Quebec

It has already been proposed that defined ship channel with proper shore mark and range lights be adopted and marked at suitable intervals with gas buoys. Th course could then be swept and thoroughly examined by the ship channel staff wit the new steamer for which provision was made in the estimates of last year, an then adhered to by all vessels.

It is impossible to sweep the whole of the river. By the adoption of certai courses marked by powerful range lights, however, the limits of the ship chann might be thoroughly examined, so that the recurrence of a ship touching on a uncharted shoal would be avoided.

February 6, 1905.—Capt. Koenig, of the ss. *Montcalm,* writes Gregory, sayin that gas buoys would be required in the Traverse, also one to be placed on the sho discovered last November off Murray Bay.

February 6.—Above letter transmitted by Gregory to the department at Ottaw

Shipping Federation suggests Lighship.

February 10.—The Shipping Federation writes the deputy minister, viz.: Th we are fast approaching the opening of navigation, calling your attention to Mori shoal, and suggesting some other aid more powerful than a gas buoy is necessary, an takes this opportunity of asking that a lightship may be located at this point, &c., & (Lighthouse Board, 15/2/05.)

Deputy suggests No. 7 Automatic Gas Buoys.

February 22.—Deputy minister, in answer to Gregory's letter of the 6th inst says that there will be shipped from Ottawa to Quebec, for opening of navigatio from 15 to 18 No. 7 automatic acetylene buoys, which are better suited for swift cu rents than the gas buoys at present in service

Matter receiving Department's Attention.

March 9.—Deputy minister writes to Shipping Federation, in answer to the letter of the 10th ult., *re* Morin shoal, and informs them the matter is to receive co sideration of the department.

May 3.—Shipping Federation (again) writes, as navigation has now commence I shall be glad to have your early decision regarding Morin shoal.

Shipping Federation replied to.

May 11.—Deputy minister writes to Shipping Federation: No lightship availab to be placed at Morin shoal, but the department has developed a very large lighte signal buoy which will, no doubt, meet the situation; in the meantime a gas buo will be placed.

Gas buoy placed by Capt. Gagnon and examined by Capt. Koenig.

May 15, 1905.—Capt. Koenig reports to Gregory that the Morin shoal gas buo was laid on May 2, by Capt. Gagnon in 4½ fathoms of water, and that he personall

visited the buoy on the 11th May, and found it properly moored and showed a good bright light. This was sent by Gregory to the department on May 16.

Meeting with Shipping Federation, who want a Lightship.

Morin shoal.—Memorandum of a meeting with Shipping Federation in Montreal, February 21, 1906.

The President of the Shipping Federation pointed out that nearly all the captains trading to the St. Lawrence are in favour of the establishment of a lightship at this place with fog alarm. This is a place they want to be able to run in a fog.

The deputy minister said he could see no objection to placing on this shoal at the opening of navigation, the spare lightship now in stock at Quebec. This was satisfactory to the Ship Federation, and the minister directed that special note be made of this for attention at Ottawa.

Attached is a copy of the notice to mariners with reference to the establishment of the gas buoy on this shoal last season, also a copy of the notice with regard to the discovery of the shoal.

April 3, 1906.—Memorandum by J. F. F. for deputy minister: With reference to the application of the Shipping Federation for placing a lightship or similar aid to navigation on Morin shoal, the undersigned calls attention to the discussion at the last meeting of the lighthouse board with reference to this matter.
J. F. F. —L. P. B.

A 2nd class lightship, if the expenditure is approved, would probably cost the department $30,000 or $40,000 wth a maintenance charge of $6,000 or $8,000 per annum.

No money available for a lightship, but $500 available for a gas buoy.—A.W.O. 5 4 06.

Before this matter is passed upon the undersigned is of the opinion that one of the large No. 11 lightship buoys should be especially adapted to this position by the addition of a 500 pound bell with modified American bell attachment and placed in position so that the Shipping Federation may decide whether it meets with the requirements of navigation.

The buoy necessary is available and the additional cost of providing the special bell attachment would probably not exceed $500.

As indicated above, before recommending the lightship the undersigned is of the opinion that the gas buoy referred to should be tried in this position.

The same remarks apply to the question of providing a lightship for the entrance to Juan de Fuca straits, British Columbia.

Deputy asks Willson what a large automatic buoy would cost.

May 10, 1906.—Deputy minister to T. L. Willson: With further reference to my letter asking you to furnish plans and estimates of cost of a large automatic buoy to be utilized in place of a lightship, I have to request you to give the information as soon as possible, as the department has been asked to place a lightship off Morin shoal, River St. Lawrence, and it does not feel justified in going to the large expense of first cost and maintenance which a lightship involves and it may be possible to meet the needs of navigation in the manner suggested above.

Deputy asks Willson when he can deliver special bell attachment for No. 11 lightship buoy for Morin shoal.

May 30, 1906.—Deputy minister asks T. L. Willson: When can you deliver to this department a special bell attachment for the No. 11 lightship buoys? I have to request you to be good enough to reply to my letter as soon as possible. The Shipping Federation urge the department to place a lightship on Morin shoal, and it is desirable

to test the No. 11 lightship buoy with special bell attachment before considering the question of the cost of a lightship.

Willson replies:—In about thirty days.

May 31, 1906.—Thos. L. Willson to Deputy Minister: Yours of May 30th, file 21159, received. In answer I have to state that I am making a special bell attachment for the No. 11 lightship buoys and as soon as the steel casting is received, for which the foundry now has pattern, I will be able to give you a definite date of delivery. At this date of writing it will probably be 30 days before delivery can be made.

Deputy advises Que. Agent of department's intention to ship No. 11 lightship buoy and give it a trial before considering a lightship.

August 9, 1906.—Deputy minister (C.S.) writes to Quebec agent: An application has been made to the department to place a lightship on the Morin shoal, River St. Lawrence.

Before considering the question of providing for an expensive aid to navigation such as the one asked for above it is the intention of the department to moor a No. 11 lighted whistling and bell buoy at this shoal.

I inclose for your information a blue print giving the dimensions of the buoy referred to.

Will you please advise me whether this buoy should be shipped to Quebec or Lévis. It can be towed into position by the *Druid*. The weight of the buoy charged is 16 tons and it carries a gas lantern with a lens of 375 mm.

Gregory says Capt. Koenig and the pilots see no use for anything but the buoy already in place.

August 16, 1906.—Gregory writes to deputy minister: Referring to above letter of August 9, I have the honour to state that I have called the attention of Captain Koenig, Superintendent of Buoys, to your communication and he stated that he had an interview with the president of the Corporation of Pilots, and he said that they never asked for a lightship on the Morin shoal near Murray bay.

The No. 11 lighted whistling and bell buoy, as shown by the blue print, is not at all suited for that locality. This buoy will draw over 26 feet of water, while there is really only 19 feet water at low tide on the shoal in question and the mariners have asked that the buoy be put right on the shoal, as now exists.

All navigators we meet here are of same opinion.

August 16, 1906.—All the navigators we come into contact with appear satisfied with what has been done. We have no idea whatever who could have asked for anything more. We cannot see the necessity for anything else than what is there at the present time, *i.e.*, buoy No. 102, 8 feet diameter, red and black horizontal bands, shoal water spar gas buoy.

Commissioner of Lights so Notifies Shipping Federation.

September 4, 1906.—Commissioner of Lights writes to Robb (Ship Federation) with reference to the proposed additional aid to navigation on Morin shoal: I have to inform you that the agent at Quebec and Captain Koenig of the *Druid* state that the Quebec pilots do not ask for any further aid to navigation on Morin shoal than the small gas buoy which is now in position. Will you please inform me if the Shipping Federation require a further aid at that point.

Shipping Federation very much surprised.

September 10, 1906.—Shipping Federation, Robb writes to J. F. F. as follows:—I beg to acknowledge receipt of your favour No. 21159 and thank you for same, informing us that the agent at Quebec and Capt. Koenig of the Canadian Government Steamer *Druid* state that the Quebec pilots would not ask for any further aid to navigation on the Morin shoal other than the small gas buoy which is now in position.

Your letter was submitted to a meeting of the executive council of this federation, and my executive were surprised to learn that the Quebec pilots were satisfied with the small gas buoy at present locating this shoal.

Are unanimously of a different opinion and are backed by many of the principal SS. Captains trading to the Port.

My executive are of the unanimous opinion that the present buoy is not sufficient to mark this shoal, as it lies right in the track of shipping, and in thick or hazy weather a ship would be right on top of it before the buoy could be seen, and that what is required here is a lightship with a good fog horn, so that a ship could get warning in time to avoid the shoal, and in coming to this decision we are supported by the following captains of the principal steamship companies trading to this port:—

Captain Jones, ss. *Canada;* Captain Ingham, ss. *Englishman;* captain of the *Huronian*; Captrin Wallace, ss. *Hungarian*; Captain Lindsay, ss. *Jacona;* Captain Christie, ss *Manxman;* Captain Maddox, ss. *Ottawa;* Captain Harrison, ss. *Pomeranian;* Captain Outram, ss. *Pretorian;* Captain Fairful, ss. *Sicilian;* Captain Vipond, ss. *Virginian;* Captain Meikle, ss. *Wobun.*

In addition to this, at a deputation of this federation which had the honour of waiting on the Minister of Marine in February last, at which the chairman of Lighthouse Board, Lt.-Col. Gourdeau, was present, an assurance was given that one if the old lightships was available for this place and we have been anxiously waiting for that promise to be fulfilled, and as far as the pilots are concerned, from past experience my executive cannot place much reliance in their vacillating opinions, otherwise we would be practically in the same state as we were 10 years ago, when the conditions, as you are aware, were unsatisfactory to all concerned.

Deputy advises Gregory that a No. 11 lightship gas and whistling buoy with special bell attachment will be sent.

September 18, 1906.—Deputy Minister writes Quebec agent thus: Acknowledging receipt of your letter of the 16th ult., in which you inform me that you have consulted Capt. Koenig and the president Corporation of Pilots, relative to the necessity for a lightship or similar aid to navigation for Morin shoal, and that the opinion is expressed that no additional aid to navigation is required. I beg to state that your representations have been laid before the Shipping Federation and the manager and secretary advises me that it is the unanimous opinion of his executive that the buoy is not sufficient to mark the shoal and that in this decision the Shipping Federation is supported by the captains of the principal ss. companies trading to Montreal.

In view of this, I have given instructions to ship to you at Lévis, one No. 11 lighted whistling buoy with special 500 lb. bell attachment, and I have to request you to have this placed in position before the close of navigation in order that it may be tested. You will please advise me when you receive the buoy, in order that the department may send a foreman to supervise charging and placing the same.

September 18.—Deputy Minister gives instructions to T. L. Willson to ship to J. U. Gregory, agent of this department at Quebec, one No. 11 whistling buoy with 500 lb. bell, via G.T.R. and I.C.R. to Lévis. This buoy is intended for Morin shoal,

River St. Lawrence. Please advise me when this shipment is made and also advise the agent at Quebec.

September 21.—T. L. Willson to deputy minister thus: As requested in your letters of April 17, June 18 and August 8, we are now able to quote you on the cost of attaching a 500 lb. bell with our improved sealed bell-ringing device operated by hard steel balls 6 inches in diameter.

We hereby quote $1,050 each for these apparatus complete, including attaching to supports of No. 11 automatic gas and whistling buoy, f.o.b. Ottawa.

In cases where the lantern supports to which it is desired to attach these bells are not at Ottawa, it is understood that your department will deliver them to us f.o.b. cars Ottawa.

Fourteen days after the buoy was shipped.

October 2.—C. Stanton for Deputy Minister, writes to T. L. Willson, viz.: Acknowledging receipt of your letter of the 21st ult., quoting price for bell attachment for Morin shoal lighted whistling buoy, I have to state that your offer is approved and you are directed to place the attachment on the lantern support of the buoy referred to.

From Mr. Willson's Engineer.

October 9.—Copy of long report made by A. E. Smail to T. L. Willson *re* No. 11 buoy Morin shoal, it was put into place. Pintsh buoy was left alongside, and the Pintsh light looked like a candle. 19, 10, '06.

H. and A. Allan write that one of their captains passed the light and found it not burning.

October 16.—H. and A. Allan write Deputy Minister thus: Captain John A. Fairful, of our ss. *Sicilian*, reports that he passed the Morin shoal buoy at dark when coming up the river on the 8th inst, and the light was out. He adds that as this patch is right in the fair way he does not think it is efficiently guarded by an unwatched light, and suggests that a light vessel be placed there.

October 23.—Deputy Minister writes Allans acknowledging receipt of letter October 16, saying lighted whistling and bell buoy placed on shoal October 10.

Captain Vipond found it burning.

October 24, 1906.—On file a letter of Capt. Vipond to the Allans: The Morin shoal light was burning bright when I passed upwards on October 20, but would suggest a lightship there in place of gas buoy.

October 24.—H. & A. Allen write inclosing above letter of Vipond, and again refer to lightship instead of the gas buoy.

Willson tenders bill for bell attachment.

October 25.—Thos. L. Wilson to Gourdeau, Deputy Minister: As directed by you under date of October 26, we have placed the bell attachment referred to, on type 11 automatic gas and whistling buoy serial No. 589. We inclose herewith invoices in triplicate covering the same.

Capt. Koenig condemns No. 11 lightship gas bell and whistling buoy as too big. Could not get satisfactory information about bell and whistle.

November 9.—Gregory sends a long report of Capt. Koenig, inspector of lights and buoys, Quebec, who strongly recommends that in place of this large buoy (drawing 28 feet), a smaller one should be moored next year, and fitted with a 300 mm. lantern which are very good lights and always seen at a distance not less than 6 miles. As to the bell and whistle, I could not obtain satisfactory information.

November 20.—Deputy Minister J. F. F. sends T. L. Wilson a copy of Capt. Koenig's report, with reference to Morin shoal.

No. 11 Gas Whistling and Bell Buoy condemned by Capt. Koenig and the Pilots.

November 22.—J. U. Gregory to deputy minister, viz.: I have the honour to acknowledge receipt of your communication of the 20th inst., No. 21159, referring to Capt. Koenig's report in regard to the lighted bell and whistling buoy recently placed on Morin shoal. I beg respectfully to state that the said buoy arrived here yesterday, 21st inst., at 9 a.m., in tow of ss. *Druid*, having been replaced by a spar buoy for the balance of the season of navigation as agreed between Capt. Koenig and Alf. La Rochelle, president of the Corporation of Pilots, as well as E. La Rochelle, superintendent of pilots here, which agreement was forwarded to the department on the 14th inst., Capt. Koenig informed me that the Morin shoal buoy was in tow of the *Druid* for 14 hours, and within the distance of her tow line the bell and whistle were rarely heard, and that each was very weak. The superintendent of pilots here informed Capt. Koenig that pilots had stated that they had not heard either the bell or whistle of the said buoy unless they were close to it. Capt. Koenig is under the impression that such a buoy on a sea coast, where there is a heavy swell and an undertow, the apparatus would be operated with very much more power than would likely be encountered with river influences.

Shipping Federation again recommend a lightship for Morin shoal, although only two of their Masters urged it.

December 7.—Robb Ship Federation sends in a synopsis of the replies received from several of the masters of vessels giving their views with regard to the new lights at Martin river, Gannet rock, Maugher's beach and Greenly island; and also the new gas buoy on the Morin shoal. You will note that eleven replies have been forwarded by masters, all of whom favourably report on the marked improvement of the lights at Martin river, Gannet rock, Maugher's beach and Greenly island, and five masters report favourably on the improvement to the light on Morin shoal. Two of them are strongly in favour of a lightship on the shoal, instead of a buoy.

Referred to Lighthouse Board, December 15.

December 13.—Recommended by Shipping Federation, December 3, that a lightship be placed to mark Morin shoal.

Lightship proposition passed by Lighthouse Board.

February 6.—One of the old lightships on Lake St. Peter is to be utilized to mark this shoal.

The above recommendation passed at a meeting of the Lighthouse Board held on February 6, 1907, approved by the Honourable the Minister of Marine and Fisheries, and now referred to the Commissioner of Lights.—20/2/'07.

This came up at a meeting of the Lighthouse Board, April 26, 1906, and was referred to the commissioner of lights for necessary action.

File 25172.

LIGHTHOUSE COMMISSIONERS BOARD.

Application to Trinity House, London, for any information which would be useful in forming the proposed Lighthouse Board.

October 30, 1903.—Deputy to secretary Trinity House, London: 'I have to request that you will be good enough to forward me any printed matter or information that you may have in reference to the formation of the Board of Commissioners of Lights. The Canadian government intend to form a board in Canada after the same lines,

and any information that you can give me on this subject will be much appreciate — Initialled G. G. V. S.

October 30, 1903.—Similar letter to Commissioner of Irish Lights, Dublin.

October 30, 1903.—Similar letter to Secretary Commissioners of Northern Lig Houses, Edinburgh.

Letter from Commissioners of Northern Lighthouses, Edinburgh.

November 10, 1903.—Received the following from Edinburgh: "I have pleas enclosing a book entitled 'Lighthouse History and Statutes,' prepared by one our staff, which, I think, you will find of service. I shall be very glad to give you information in my power on any point which may occur to you during your perus

Lighthouse Board Appointed.—Members: Lieut.-Col. Gourdeau, Deputy; Col. W. Anderson, Chief Engineer; Comr. G. G. V. Spain, J. F. Fraser, Comr. of Light; Hugh A. Allan, Montreal.

January 14, 1904.—To His Excellency the Governor General in Council: With view to meeting the rapidly increasing requirements of the service in connection wi the construction and maintenance of lights and fog alarms, etc., throughout t Dominion the undersigned has the honour to recommend, under the provisions chap. 70 of the Revised Statutes of Canada, as amended by 57-4 Vict., chap. 41, th a board, to be called the lighthouse board of Canada, be appointed to inquire into a report to him from time to time upon all questions relating to the selection of ligh house sites, the construction and maintenance of lighthouses, fog alarms and all oth matters assigned to the Minister of Marine and Fisheries by section 2 of chap. Revised Statutes. The board to be composed of the following: Lieut.-Col. F. Gou deau, chairman; Lieut.-Col. W. P. Anderson, Comr. G. G. V. Spain, J. F. Fras Comr. of Lights; Hugh A. Allan, Montreal, W. C. Gordon to act as secretary. T undersigned also recommends that when any matters pertaining to aids to navigatio within the Montreal or Quebec pilotage districts are under consideration by the boa the president for the time being of the corporation of pilots for these respective di tricts shall, respectively, be ex officio a member of the Lighthouse Board when su moned by the chairman to attend such meetings. The members of the board oth than officials of the Marine and Fisheries Department, to have their travellin expenses paid when attending meetings of the board, and in addition an honorariu of $5 a day.

R. H. Fraser Appointed Assistant Chief Engineer.

June 3, 1904.—To His Excellency the Governor General: R. H. Fraser to appointed Assistant Chief Engineer of the Department of Marine and Fisherie with authority to represent the Chief Engineer on the Lighthouse Board of Canad and to act for him generally whenever that officer may be absent from headquarter Memo. to that effect by W. P. A., June 3, 1904, initialled R. P.

W. H. Noble Appointed Assistant Commissioner of Lights.

July 24, 1905.—To His Excellency the Governor General: Recommend that W H. Noble, Asst. Commissioner of Lights, be appointed Asst. Commissioner of Light of the Department of Marine and Fisheries, with authority to represent the Com missioner of Lights on the Lighthouse Board of Canada, and to act for him generall whenever that officer may be absent from headquarters.

J. F. recommends that notice should be given beforehand to Members of Lighthouse Board of all new applications for Aids to Navigation.

September 1, 1905.—Memorandum by J. F. F.: 'With reference to applications for new aids to navigation which come before the Lighthouse Board, it has been observed in many cases that the members of the board learn of the application for the first time when the board meets. In many cases no member of the board has had an opportunity of visiting the locality where the new aids are asked for, and it is difficult at times to give any question the full consideration which its importance may merit. In order to obviate this difficulty the undersigned strongly recommends that instructions be given to the secretary of the board to prepare a precis with reference to the new aids asked for, and that a copy be given to each member of the board sufficiently in advance to the meeting, so that the matter can be looked into and considered in advance to the meeting.'

C. J. Smith, B. and O. Nav. Co. to Deputy re Meeting Lighthouse Board.

March 20, 1906.—Letter from C. J. Smith, G. M. B. and O. Nav. Co., to Deputy: 'Mr. Ewen Allan told me a day or two since that possibly there might be a meeting of the Lighthouse Board on Saturday next. As we have several matters to bring before the board may I ask that you notify me two or three days in advance of the meeting, in order that we may have an opportunity to be represented.' This letter marked is received March 21: written on upper left corner, 'Received 3.35 p.m., 21/3/06.'

March 23, 1906.—Deputy telegraphs C. J. Smith: 'Meeting of Lighthouse Board tomorrow at 12.30.'

March 23, 1906.—Wm. Sloan writes to minister in favour of having British Columbia represented on the Lighthouse Board.

March 30, 1906.—Minister replies.

Capt. Troup, of C. P. R., British Columbia, to be a Member Lighthouse Board.

April 5, 1906.—Memo. for Deputy Minister by L. P. B.: 'Captain Troup, manager C. P. R. SS. lines in British Columbia, is recommended to act on the Lighthouse Board for British Columbia matters. I am told that he would probably act without remuneration, and that even the cost of his trip east once a year or so would be reimbursed by the C. P. R. Would there be any objection to his appointment.'

Memo. for the Minister by Deputy: 'After consulting with members of the Lighthouse Board, I consider it would be an advantage to have Captain Troup nominated as a member of the board, if his appointment will not involve any expense to the department.

Suggests that Chief Engineer be sent to British Columbia to consult with Captain Troup about whole subject of protection to navigation on that coast.

In view of the many proposals for improvements in aids to navigation suggested as a result of the *Valencia* disaster I think it would be well to send the Chief Engineer of the department to British Columbia after the session to consult with Captain Troup and report to the minister on the whole question of protection to navigation on that coast, including the exact location of the proposed new fog alarm in the Strait of Juan de Fuca, the organization of a life-saving service, and improvement of telegraphic communication, &c.'

May 10.—Memo. for Deputy Minister by L. P. B.: Please prepare letter to J. W. Troup, Victoria, B.C., asking if he would accept a position on Lighthouse Board to represent the interests of British Columbia.

J. W. Troup appointed to Lighthouse Board.

May 12, 1906.—Deputy to Capt. J. W. Troup, Victoria, B.C., offering him po tion on Lighthouse Board.

May 23, 1906.—J. W. Troup to minister: Accepts on condition that he can ma only one trip a year.

September 29, 1906.—Deputy telegraphs J. W. Troup 'Propose holding meeti Lighthouse Board Wednesday, October 10, when British Columbia matters will considered. Will it be convenient for you to attend? If so, you are authorized draw on the department for $200 expenses. Answer.'

October 2, 1906.—J. W. Troup to Deputy: 'Am arranging to be in Ottawa 10 inst., as per your telegram.'

Information wanted by English Royal Commission on Lighthouse Administratio

November 7, 1906.—Memo. received from Lord Elgin showing the points on whi information is desired by the Royal Commission on the lighthouse administration the United Kingdom, and to request you to invite your ministers to furnish answe to the several questions for the information of the Royal Commission.

December 13, 1906.—Memorandum (not signed): Can the deputy minister adv where the original minutes of the Lighthouse Board are filed?

Chief Engineer's Reply to above inquiry from England.

January 22, 1907.—Deputy to Governor General's secretary inclosing report Chief Engineer as to matters inquired about by Royal Commission on Lighthou Administration. Report as follows:—

I. The lighthouse administration and other aids to navigation in Canada administered by the Department of Marine and Fisheries. Up to 1905 all these a were under the sole control of the Chief Engineer's branch of the department, in that year a commissioner of lights was appointed, who was given charge of establishment of buoys, and of the maintenance of lighthouses, construction work o being left in charge of the Chief Engineer. A lighthouse board was also appoint whose duty it is to report to the Minister of Marine and Fisheries on applicatio for new aids to navigation referred to them for consideration. The power of acti on the reports of the Lighthouse Board remains in the minister as representing government of the country, and he also has authority to order the installation of a not recommended or considered by the Lighthouse Board; in other words, the sole co trol rests in the government of the country, represented by the Minister of Mari and Fisheries. There are no semi-official commissions or committees, nor are a private lights maintained, with the exception of a few private wharf lights.

II. The Lighthouse Board consists of four officials of the Department of Mari and Fisheries and one ship owner. The officials are not paid, but the outsider allowed travelling expenses. Other men having knowledge of shipping conditio are invited from time to time to attend meetings of the board at which matters affe ing districts in which they are interested are discussed.

III. The only experts in connection with the department are the technical offic who have charge of the establishment of new aids to navigation: (*a*) The erection new stations is under the supervision of the Chief Engineer of the department, w either in person or through resident engineers inspects localities where new aids asked for and carefully locates the sites before plans are prepared; (*b*) The Ch Engineer has had an experience of 32 years in this branch of work, and is an ackno ledged authority on location and erection of light buildings; the equipment of lig houses is under the control of the Commissioner of Lights, a trained official;

Putting out of contracts—Contracts for construction are invited through the Chief Engineer; contracts for maintenance and supplies are invited by other branches of the department; contracts are almost invariably awarded after tenders have been publicly invited, and all contracts are awarded on the minister's approval.

IV. The officials of the department are appointed under the Civil Government Act and hold office as civil servants for life. The Chief Engineer of the department receives a salary of $3,000 per annum and the Commissioner of Lights $2,500. No qualifications are required by law, but all the engineering officials of the department have engineering qualifications.

V. All lights are free to shipping, the expenditure being provided out of the general revenue of the country. The Privy Council of Canada allots the amounts to be expended on construction and maintenance accounts yearly. The expenditures are all authorized from the department, and are certified by the several officers. Accounts are audited by the general auditor of the Dominion.

VI. From the constitution of the department it is manifest that appeals can easily be made to the minister as the head of the department. He is responsible to the Privy Council and to parliament, and has full control of all departmental policy.

VII. The aids to navigation have been under the control of the Department of Marine and Fisheries since confederation in 1867, and the system has been found satisfactory. The only alterations made have been the appointment of the Commissioner of Lights and of the Lighthouse Board, as already explained, for the sake of distributing the work in consequence of the rapid growth of the country.

VIII. No remarks. This question was, 'Any other remarks?'

IX. In December, 1905, in the Dominion of Canada, there were 822 light stations from which 1,038 lights were exhibited, under the control of 837 light-keepers. There were 78 steam fog alarms, 15 fog bells and nine fog guns or bomb stations, 119 gas buoys, 53 whistling buoys, 43 bell buoys, and about 3,800 smaller buoys, under the control of the department, submitted herewith.

X. The whole of the coasts of Canada, including the Atlantic and Pacific seaboards, the great lakes and the inland rivers are under the control of this department for aids to navigation. I am not aware that the length of coast line has ever been estimated, but it covers a great many thousands of miles.

XI. The yearly expenditure of the department for the last published fiscal year, and a comparative statement of expenditure for many years past will be found in appendices 14-17 on pages 235-245 of the report.

Method of dealing with matters passed by the Commissioners of Lights.

April 6, 1907.—Memorandum for the Chief Engineer and the Commissioner of Lights: In future after the minutes of the Lighthouse Board have received the approval of the minister, the proper officers will prepare a report to council of all recommendations of $5,000 or over, giving detailed information in each case. A minute of each recommendation of $5,000, or over, will be prepared by the secretary of the Board and handed to the proper officers, so as to have the necessary reports to council drafted. Signed F. Gourdeau, Deputy Minister. Initialled, W. P. A., J. F. F., B. H. F., A. W. O.

April 17, 1907.—Memorandum for the chairman of the Lighthouse Board (by J. F. F., C. of L.): The undersigned desires to bring the attention of the Lighthouse Board to certain recommendations that have been passed at previous meetings, and for the purpose of inviting discussion on this point, moves, seconded by Commissioner Spain, that the board reconsider the following recommendations passed at a meeting held on February 26, 1907 :—

1st. East Head, Musquash—4th order apparatus and quick-flashing light, present lantern on a new tower, $5,000.

2nd. Cape Spencer—Illuminating apparatus, $2,000; fog alarm and tower, $13,000.

3rd. Cape Jourimain to be improved to a 4th order quick flashing light, $2,

4th. Miscou, Bay Chaleur—New lantern and central panels. 1st order flash apparatus, $5,000.

5th. Escuminac, light to be improved to a 3rd order flashing light, to be usec present French lantern ; details to be arranged by commissioner of lights, $6,000

6th. Flower Island—Central range, 3rd order apparatus to be placed in pre lantern and tower. (?)

7th. Lepreau—3rd order flashing light, $7,000.

(Passed February 6, 1907, when chief engineer reported present, * * * * * * except No. 7, which was passed at meetings October 10, 11, 1906.)

The point which the undersigned desires to raise is that in practically every the recommendation provides that the existing lantern is to be used and that central belt of the dioptric apparatus is to be provided. All these recommendat were passed by the Board during the illness of the undersigned, with the exceptio the recommendation relative to Lepreau. This latter was concurred in at the t and since the meeting of the Board at which the Lepreau item was passed, the un signed has given consideration to the whole question raised above, and is of the opi that if it is practicable to make any change whatever in the lights referred to, th is not necessary to provide the apparatus and lantern complete, inasmuch as it does appear reasonable to pay the major portion of the cost of the complete apparatus only receive the central belt. The existing lantern cannot be used without elimina the upper prisms of the dioptric lights which provide about one-third of the ligh power when incandescent mantles are used. The flat glazing of the existing lant is objectionable principally on account of the light reflected back into the lantern, the possibility of false flashings being produced. Lanterns of the Canadian are not used for dioptric lights by the most prominent lighthouse engineers in c countries, and the undersigned can see no reason for adopting a less efficient me for Canada, and asks that the above recommendations be reconsidered and the com apparatus provided.

Memorandum by Chief Engineer for Minister, protesting against above memoran by J. F. F.

April 22, 1907.—Memorandum submitted for the minister's information *re* Lighthouse Apparatus, recommended by Lighthouse Board in connection with Memo. prepared by the commissioner of lights, objecting to the action of the L house Board in proposing to place improved illuminating apparatus in the pr lanterns at seven lightstations. The undersigned begs to submit his reasons t minister for objecting to the conclusions of the commissioner of lighthouses. present lanterns at the seven stations are as follows:—

1. At east head Musquash the lantern is a 10-foot cast-iron lantern of Can manufacture.

2. At Cape Spencer, there is a similar lantern.

3. At Cape Jourimain the lantern is a bronze lantern of either English or F make.

4. At Miscou, it is proposed to obtain an English lantern.

5. At Escuminac the present lantern is a first rate bronze French lantern

6. At Flower Island the lantern is a 10-foot cast-iron one, Canadian make— tower and lantern being new in 1899.

7. Point Lepreau—A new cast-iron Canadian lantern of improved design furnished in 1899. This lantern has glazing 4 feet high.

The commissioner of lights wishes to condemn these lanterns and provide English lanterns with illuminating apparatus, including upper prisms, and ag this proposal I most strenuously protest on the ground that a change in the lan is not required, and that such change would not only entail very heavy expenditu

new lanterns, but would also entail rebuilding most of the towers to carry the heavier and larger English lanterns. The commissioner objects to the central rings only being provided, on the ground that about one-third of the lighting power is lost by omitting the upper prisms. I deny emphatically that one-third of the light comes from the upper prisms. They only transmit a very small percentage of the light, and it has been the best practice of lighthouse apparatus makers to omit them altogether in many recent installations, on the ground that they are not worth the extra expense involved, and that the lantern was more compact without the extra height of glazing required to accommodate the upper prisms. I would point out the general objections made to our Canadian lanterns is the fact that they have vertical sash bars and flat glazing. The cry against our Canadian lighthouses has been raised by European makers of lanterns simply so that they could supply their own more expensive style of manufacture. As a matter of practical use of the lanterns there is no great difference in the efficiency of the flat glazing and the curved glazing. The lights under discussion are none of them main sea coast lights, most of them are in narrow channels where the distance to be covered is quite restricted. The centre prisms of 3rd order apparatus with incandescent lights in them are stronger than the old first order lights, and are amply sufficient to meet all requirements of navigation. Therefore the undersigned sees no reason to condemn lanterns and buildings that will serve every practical purpose, for the mere purpose of incurring useless additional expense. Respectfully submitted, W. P. Anderson, member Lighthouse Board. Stamped: 'Referred to chief engineer, May 21, 1907.' Note on margin: 'This should be laid before the Minister, W. P. A., 21/5/1907.'

LIGHTHOUSE BOARD MINUTES.

Quebec ($151,700).

June 15, 1905.—Cape Anguille, Newfoundland Coast—Complete new station, $30,000, illumining apparatus for same, $10,000; outward bound vessels have no warning should they make a land fall to the northward of Cape Ray ($40,000).—(Colonel Anderson dissenting.)

Cape Ray, Nfld.—New dwelling for keeper; old one practically uninhabitable in winter (this is chargeable to maintenance) ($2,500).

River St. Lawrence.—To provide for the manufacture of steel frames for permanent lighthouses. It is the intention to have these built at the department's works at Sorel and are for superstructures to be placed on permanent piers referred to in the estimates for ship channel ($15,000).

Belle Isle, north end.—To complete dwelling for the staff at this station ($5,000). To complete the installation of machinery ($1,500).

This work will complete this station, which was started two years ago. Only four months work can be done each year owing to distance from base of supplies.

Algernon Rock.—To rebuild the foundation of lighthouse in concrete as recommended by chief engineer. This must be attended to at once as the tower is actually in danger ($6,000).

Cape Race.—Improved tower. (A hyperradial light to be substituted for the first order triple flashing light passed by board and approved by minister October last. No estimate is required for this change as commissioner of lights is of opinion that it can be arranged out of the amount already provided ($5,000).

Bird Rocks.—New fog alarm ($20,000).

St. Paul's Island.—New fog alarm, improving aids to navigation, new lighting apparatus (provided results of future investigations favourable which are to be conducted under chief engineer) ($40,000).

[illegible] Island.—[illegible] (\$[illegible]).

[illegible].—New tower (\$[illegible]).

[illegible].—[illegible]

[illegible] Island.—Bell buoy (\$[illegible]). [illegible] Commander [illegible].

[illegible] Brunswick (\$[illegible]).

[illegible].—New fog-alarm (\$[illegible]).

[illegible].—[illegible] beacon light. [illegible] (\$[illegible]).

[illegible] (\$[illegible]).

[illegible] Island.—[illegible] (\$[illegible]).

[illegible].—New dwelling for assistant keeper [illegible] (\$[illegible]).

[illegible] (\$[illegible]).

Prince Edward Island (\$[illegible]).

[illegible].—New light [illegible]

[illegible].—Repairs. [illegible]

Quebec (\$[illegible]).

[illegible].—New tower and dwelling [illegible] (\$[illegible]).

Ontario (\$[illegible]).

[illegible].—New tower on pier. This tower is to be erected [illegible] and contract for same has been let. (\$[illegible]).

[illegible].—New dwelling for keeper; old dwelling practically unfit for [illegible] (\$[illegible]).

~~Burlington.—New tower. Contract let (\$[illegible]).~~

[illegible].—New tower to replace a wooden building struck by lightning. (\$[illegible]).

[illegible] Island.—New light asked for by Dominion Association of Masters and Mates (\$[illegible]).

[illegible] Sound.—Permanent range and lights (\$10,000).

[illegible] Island.—[illegible] light (\$[illegible]).

[illegible] Reef.—Protection work now in hand (\$[illegible]).

Nova Scotia (\$[illegible]).

[illegible] Island.—New dwelling for keeper (\$[illegible]).

[illegible] Passage—New dwelling ($[illegible]).

[illegible] Point—[illegible] new tower and lighting apparatus; tower $[illegible]; apparatus $[illegible] ($[illegible]).

[illegible] Point—[illegible] Point, River [illegible] [illegible]. Steel buoys to be placed.

[illegible]—Light on breakwater ($[illegible]).

British Columbia Section.

[illegible] Island—New station. This includes erection of tower, fog alarm building, [illegible] and [illegible], and purchase and installation of fog alarm machinery. This is strongly urged by all shipmasters, as the island is a menace to all vessels approaching Victoria from westward. This estimate also includes the light and apparatus ($[illegible]).

[illegible]—New fog alarm. Recommended by agent and by Mr. [illegible], assistant commissioner of lights ($[illegible]).

[illegible] Ledge—New fog alarm. Recommended by Mr. [illegible] ($[illegible]).

[illegible] Island—New tower. Recommended by Victoria Board of Trade and all navigators, and by agent ($[illegible]).

For improvements and new aids to navigation in British Columbia. This includes [illegible] [illegible] Island, [illegible] Island, [illegible] Island, [illegible] Island ($[illegible]).

Total $[illegible].—[illegible] 21, [illegible].

Recommendation of Commissioner of Lights amounting to [illegible] $[illegible].

[illegible] 24, [illegible].—This meeting was called especially to consider a recommendation [illegible] by the Commissioner of Lights in regard to the desirability of carrying out certain improvements in the coast signal buoy service. The improvements suggested [illegible] of two kinds:

(a) Increasing materially the size of the present signal buoys, thereby adding to their power.

(b) Lighting the same, adopting the new principle of automatic acetylene lights. [illegible] system it is pointed out that each buoy contains its own gas supply and is [illegible] independent in respect to lighting of any shore plant or station. It was represented to the Board that this automatic principle has been tested in service and found entirely satisfactory, the standard 'lighted' whistling buoy at the outer [illegible] [illegible] Halifax harbour, which has the same area of whistling tubes as the Courtenay whistling buoy, having proved much superior as a whistling buoy. A description of [illegible] sizes and types of lighted signal buoys was submitted by the Commissioner of Lights ranging in price from $[illegible] to $[illegible] each, the latter being the type recommended for favourable consideration, which is a special lighted whistling buoy [illegible] [illegible] diameter, twin whistling tubes [illegible] inches diameter, [illegible]-inch whistle, focal plane of light [illegible] feet above water. Area of whistling tubes [illegible] square feet; weight, charged, [illegible] tons; to be substituted for existing buoys at the following places:—

Nova Scotia: Sambro, Egg Island, Ship Harbour, Sheet Harbour, Beaver Island, Liscomb, Isaac's Harbour, White Head, Cape Canso, Louisbourg, Lunenburg, La Have, Lockeport, Brazil Rock, Yarmouth Fairway, Cape Fourchu, Northwest Ledge, Southwest Ledge, Little Hope Island, Sydney Harbour (20).

New Brunswick: South Wolf, Split Rock, Black Point, Zenker Rock, Lepreau, Musquash, Quaco Ledge (7).

Prince Edward Island: Indian Rocks, Tryon Shoal, Fitproy Rock (West Point), making a total of 31 'special lighted' whistling buoys as given above, at $8,500 $263,500).

II. The purchase of two 'lightship whistling buoys,' elliptical in plan, arcs 11 feet and 14 feet, twin whistling tubes 48 inches diameter, 18-inch whistle, focal plane of light 30 feet above water, area of whistling tubes, 25 square feet; weight charged, 19 tons; cost, $15,000 each, for the following places: Halifax Harbour and Blonde Rock, N.S. ($30,000).

III. Twenty-five standard No. 7 gas buoys at $3,000, for the following places: (a) to complete number required for Quebec agency, including 3 spare buoys; (b) to provide for Parry Sound district, including 3 spare buoys; (c) to provide buoy for Niagara Lake, Ontario ($75,000).

31 buoys, No. 11	$363,500
2 No. 14	30,000
25 No. 7	75,000
II	$368,500

Commissioner of Lights recommendation endorsed by L. H. Board and approved by Minister on condition that proposed experiment with the Special Lighted Whistling Buoy on Lurcher Shoal be deemed a success.

IV. This totals a sum of $368,500, and the board, after full discussion, came to the conclusion that in so far as the test of the Halifax inner automatic was concerned it was not sufficient to justify the submission of a recommendation for your approval for so sweeping a change in the buoy service on the Atlantic coast without further evidence of the reliability of the light and whistle under exposed ocean conditions, and to this end the Commissioner of Lights was instructed to place a special lighted whistling buoy on the Lurcher shoal in the Bay of Fundy for one month during which time it can be observed continuously from the Lurcher lightship, and a complete record kept of the test, which record is to be forwarded to the department by the captain of this lightship. If the Lighthouse Board is then satisfied with the completeness and success of the test above referred to, it was decided to recommend for your approval, which is now respectfully done, the adoption of the special lighted whistling buoy for the 31 places enumerated elsewhere in these minutes, the purchase of lightship whistling buoys for Halifax harbour and Blonde Rock, N.S., and the 25 standard No. 7 gas buoys. The board met at 11.30 o'clock a.m., and adjourned at 11.58 a.m. All of which is respectfully submitted for the approval of the Honorable the Minister of Marine and Fisheries, F. G. (Approved by Minister 29th July, 1905). (No further action until report of test is received). Copy given to the chief engineer, also Commissioner of Lights, 29/7/'05.

August 5, 1905.—At this meeting, 'careful consideration' was given to all applications brought forward, and attached will be found the recommendations, which are now respectfully submitted for your approval. Board met at 11 a.m. and adjourned at 12.05 p.m.

Recommendations.

Nova Scotia—Bar reef, Main-à-Dieu passage: whistling buoy to be placed 3 cables E.S.E. from Helen rock, eastern extremity of Bar reef, in about 40 fathoms of water, asked for by petition from Main-à-Dieu and recommended by Mr. Johnson, M.P.; also by agent at Halifax. Spare buoys on hand. No cost.

North Sydney bar: Department to build independent foundation for light as Public Works will probably not build any extension to ballast wharf. Chief engineer to look into this personally when in North Sydney. Mr. D. D. McKenzie, M.P., is concerned about this light.

Big Patch shoal: Bell buoy to be substituted for spar buoy. Asked for by petition from Port Felix through Mr. Sinclair, M.P., and recommended by Supt. of Lights. No cost. Spare buoys on hand.

Cape North, N.S.: New fog alarm. (This item was passed at meeting of board held on 15th June, 1905, but omitted in minutes). ($20,000).

New Brunswick—Cocagne harbour: Range lights to be established on mainland in Cocagne harbour, to lead to the inner harbour anchorage. Pole light ($500). This includes cost of lantern.

Ontario—McKay island, entrance Bruce Mines, Lake Huron: Small lighthouse to be erected here. (Boat captains plying in these waters petitioned for some aid, suggesting a gas buoy on Prout reef.) Chief engineer visited the place and reported that failing a gas buoy on Prout reef, what is wanted is a light on McKay island. ($800).

Jackstraw shoal: To be changed to a red light; no expense.

Gananoque narrows: Gas buoy to replace barrel buoy; no expense.

Fiddler's Elbow: Gas buoy to replace barrel buoy ; no expense.

III. Total—$21,300.

The above three changes are asked for by masters plying in these waters.

Aids to Navigation applied for, but allowed to stand over or declined.

Locality and details of aids to navigation applied for: No date.

26623. Dimock's point: at mouth of St. Croix river, near Windsor, N.S.; asked for by petition through Mr. Black, M.P., who recommends same; also recommended by Supt. of Lights.

25523. Avon river, Minas basin: Lightship wanted where fairway buoy now is; asked for by petition forwarded through Mr. Black, M.P., who recommends same. Inspector Hutchins recommended a gas buoy instead. To stand.

Harbour island, Darby point: Light asked for by petition through Mr. Sinclair, M.P.; known also as Holly point. To stand.

Western head, Liverpool harbour: Fog alarm asked for by petition through Hon. Mr. Fielding. Recommended by Supt. Hutchins. To stand for want of money; and Mr. F. so informed 8th August, 1905.

Middle Ledge, Isaac's harbour: Asked for by petition from Isaac's harbour; does not say what. To stand.

Larry's river: Light on breakwater asked for by petition. Breakwater not completed and consideration of establishment of light deferred. To stand.

Gannet rock and Brier island: Establishment of whistling buoy in fairway recommended by Supt. Hutchins. Not entertained.

Sydney, C.B.: Automatic buoy off harbour mouth. Asked for by Capt. Hackett; reported against by chief engineer. Refused.

St. Peter's island: Lighthouse asked for by petition through Mr. Finlayson, M.P. Recommended by Supt. Lights. To stand.

Bass river: Light on wharf; asked for by Hugh McKenzie, Truro, and recommended by Hon. Mr. Fielding. Suggested that Point is better place. Referred to chief engineer, 8th August, 1905.

Purdy's turn, Jemseg: Light asked for by petition through Hon. Mr. Emmerson, who recommends same. To stand for present. No action.

March 31, 1906.—Meeting March 31, 1906. The following gentlemen appeared before the board to plead the merits of the various applications for aids to naviga-

tion in which they are particularly interested: Wm. Sloan, M.P., Comox, Atlin, B.C C. J. Smith, gen. mgr. Richelieu and Ontario Navigation Company, Montreal. Carefu consideration was given all matters brought up and attached will be found the recom mendations agreed upon. Board met at 11.30 and adjourned at 3.40.

$74,380.

British Columbia—Lookout island: 30-day light. (B.C. Board of Trade aske for this, also Mr. Sloan, M.P., and recommended by chief engineer, and agent, B.C ($750).

Yellow island Baynes' Sound: Fog alarm asked for by Mr. Sloan, M.P., als Vancouver Shipmasters' Association. Building, $4,000; 1½ inch diaphone, $3,50 ($7,500).

Pultney point: Fog horn (hand); asked for by Vancouver Shipmasters' Associ tion; also Mr. Sloan, M.P. ($50).

Scarlet point, Christie pass: Fog horn (hand), asked for by V.S.A., and M Sloan, M.P. ($50).

Egg island: To complete fog alarm and install machinery ($5,000).

West coast, Vancouver island: A new station to be erected on a site to be selecte recommended by assistant chief engineer (B. H. F.) not present at meeting. ($30,000

Pine island: Fog alarm, new tower and dwelling asked for by V. B. of Trad and recommended by agent and assistant chief engineer ($16,500).

Lucy island: New tower and dwelling, asked for by Mr. Macpherson, M.P., 1904; reported favourably by chief engineer, September, 1905. ($5,000).

To erect small lights as may be found most desirable; asked for by assistant chi engineer and included in estimates ($2,000).

General account: This is asked for by assistant chief engineer, and is to cov travelling expenses of agency officials, general repairs, superintendence, inspection works, salaries of engineers, &c. ($8,000).

Ivory island, Milbank sound: Fog signal wanted; asked for by Mr. Sloan, a also by Van. S. A. The chief engineer intimated that Mr. B. H. F., assistant chi engineer, is now working on a self-contained fog alarm which might be tried at th place. No estimate of cost.

$9,000.

Prince Edward Island—Indian point: To rebuild foundation of tower. Wo very necessary and cannot be delayed, so the assistant chief engineer reports. ($4,000

Souris: To erect and complete the steel lighthouse provided for this statio Recommended by assistant chief engineer. ($1,000).

General account: Asked for by assistant chief engineer, and to cover gener repairs, superintendence, inspection of works, salaries engineers, &c., locally employe and travelling expenses of agency officials. ($4,000).

$17,000.

New Brunswick—Cape Tormentine: Range lights; asked for by petition se through Mr. Emmerson and recommended by agent at Charlottetown. No estima Only additional cost is salary of keeper for summer, as range lights are in positi and operated in winter, when *Stanley* is on route.

Fog alarms: Improvements to existing fog alarms; asked for by assistant chi engineer. ($8,000).

Small lights: Asked for by assistant chief engineer. ($1,000).

General account: Asked for by assistant chief engineer, and is intended to cover general repairs, superintendence and inspection of work, salaries of local engineers, &c., and travelling expenses of agency officials. ($8,000).

$112,900.

Nova Scotia.—Cape North, fog alarm. Assistant chief engineer says this was to have been done last year, but was not overtaken. Material has been purchased and machinery can be obtained from a station where a low-pressure pattern diaphone has been installed ($7,500).

Light to be changed to a quick flashing light—recommended by Shipping Federation and asked for by commissioner of lights. More information seems to be wanted for this large vote ($17,250).

North Sydney: Pier and light. Assistant chief engineer says this is to replace the mast light carried away by storm, and must be built in a more substantial manner than the former one ($5,000).

Sydney harbour (entrance) Low Point light. Illuminating power to be increased and light made distinctive; asked for by Shipping Federation ($17,250).

Cape George: Tower and dwelling to be rebuilt. The agency officials report that this tower cannot last another season. Assistant chief engineer says it has been left till last minute ($4,000).

Port Maitland, Yarmouth county: Fog bell for end of pier (asked for by petition sent through Mr. Law, M.P., who strongly recommends same; also agent) ($600).

Eastern Point reef, Lunenburg county: A combination gas and bell buoy; asked for by petition, and recommended by Mr. Maclean, M.P. Commissioner of lights recommends a lighted bell buoy. Inspector of lights, Nova Scotia, reports favourably. (Have one in stock, no expense).

Goillon reef, Lennox passage: Conical steel buoy to replace present spar buoy. (Asked for by Mr. Finlayson, M.P., and reported on favourably by superintendent of lights, Nova Scotia) ($300).

Goulet beach, Cape la Ronde, Lennox passage: Iron can buoy (asked for by Mr. Finlayson, M.P., superintendent of lights, Nova Scotia, reports favourably and says there are spare buoys in stock)—no cost.

Liscomb or Wedge island. These two lights are very similar, and Capt. Johnson, of the *Lady Laurier*, recommends that one of them should be changed. (No cost).

Cumberland basin: Two black spar buoys be placed to mark the channel opposite Fort Cumberland. Also two spar buoys (one black and one red) to mark the turning point; easterly to lead into the channel asked for by Mr. Logan, M.P. and recommended by superintendent of lights, Nova Scotia) (in stock, no cost).

Yarmouth harbour, Hen and Chickens: Gas and bell buoy, to replace conical buoy (in stock).

John's cove: A black can buoy to be replaced (asked for by Mr. Law, M.P., and recommended by Superintendent Hutchins) (in stock, no cost).

Cerberus, Chedabucto bay: Asked that a whistling buoy be placed. Petition sent through Mr. Finlayson, M.P., who recommends same. Superintendent Hutchins reports favourably for an automatic whistling buoy be placed ½ S.W. from the Cerberus in about 26 fathoms water (one in stock).

Grand Digue, Lennox passage: Superintendent of lights, Nova Scotia, reports that mariners complain of the pole lights here, and recommends that a tower 33 feet from base to vane, like one on Freestone island, be erected—chief engineer concurs ($2,000).

Fog alarms. Improvements to existing fog alarms ($25,000). The inspector of fog alarms has made a partial inspection of Nova Scotia fog alarms and finds that a

large number require new boilers and other improvements. The assistant eng asks for this amount, which is in the estimates.

Small lights: Not enumerated, but asked for by assistant chief engineer ($2,(

General account: To cover general repairs, inspection of work, salaries of engineers, &c., and travelling expenses agency officials, and unforeseen expenses (a for by assistant chief engineer) ($20,000).

Cranberry island, Brier island, Cape Sable, Scattarie: To complete the inst tion of fog alarms at above places (asked for by assistant chief engineer) ($10,0

To pay for contracts already awarded, but which will not be completed be July 1 (asked for by assistant chief engineer) ($2,000).

Ontario ($74,900).

Presqu'Isle, Lake Ontario: Fog alarm wanted (asked for by Lake Ontario Bay of Quinté Steamboat Company, one of whose steamers went ashore there in a f also by Dominion Marine Association, Kingston, and Mr. Smith, manager Richel and Ontario Navigation, who appeared personally before Lighthouse Board) ($10,00

False Ducks: Duplicating machinery and rebuilding lighthouse and dwelli ($5,000). The tower of this place was struck by lightning last fall and the dwelli destroyed by fire (asked for by assistant chief engineer).

Port Colborne: To enlarge the fog alarm building and duplicate the machine and move existing lights to suit improvement. (The assistant chief engineer says th work must be of the strongest description. Port Colborne is a most important poi and the engineer should have better accommodation and duplicate machinery, as case of a breakdown he would be helpless) ($12,000).

Mississagi strait: To rebuild the fog alarm at this place, which is used up (aske for by assistant chief engineer) ($10,000).

Thames river: Gas buoy to be placed at mouth of channel leading into Thame river (asked for by Mr. Clements, M.P. Have one in stock, but freight, moorings, &c will cost $200).

Surprise shoal, Georgian bay: Gas buoy with bell (asked for by Canadian Associa tion of Masters and Mates); also by C.P.R. SS. Co. Recommended by Chief Hydro grapher, W. J. Stewart.

Port Dalhousie: Front light on end of pier should be a red light (asked for by petition of Canadian Association of Masters and Mates) (small cost, no estimate given).

Small lights, not enumerated, but asked for by assistant chief engineer ($2,000).

Fog alarms: Improving existing fog alarms ($15,000). It is reported by the assistant chief engineer that the fog alarms on the lakes have not been properly inspected heretofore. A new system is being organized, and it is expected a good deal of work will be found urgently necessary in connection with the plants.

General account: The assistant chief engineer says there is large repair work to be done in this agency, such as lighthouse at Almonte, Sulphur Island, Little Current, shelter shed at Stokes bay and repairs at Bois Blanc, Chantry island, Black Bear island, Saugeen, Penetanguishene, Gull harbour, Red river and completion of works at Georges island and Collingwood ($20,000).

Quebec ($144,925).

Belle Isle high light: Illuminating power to be increased and character of light changed from fixed to occulting, 5 seconds light and 5 seconds dark (asked for by Shipping Federation) ($1,250).

Belle Isle low light: Illuminating power to be increased with a new 2nd order lens showing over an arc of 240° and light changed from fixed to occulting (recommended by Shipping Federation) ($1,250).

Flower island: Most powerful illuminant to be installed, and present light changed to one giving two flashes every 10 seconds (asked for by Shipping Federation) ($17,250).

Point Rich, Nfld.: A triple flashing light to be provided, giving three flashes every 20 seconds (asked for by Shipping Federation) ($17,250).

Belle Isle straits: That a beacon be erected on the Nfld coast about 18 miles west of Cape Norman (asked for by Shipping Federation) ($150).

Cape Pine, Newfoundland: Character of light to be changed to flashing 3rd order. Illuminating power to be increased (asked for by Shipping Federation) ($17,250).

Port Basque, Newfoundland: Illuminating power of light to be increased and light changed to a quick flashing white light (asked for by Shipping Federation) ($17,250).

Cape Chatte: Illuminating power of light to be increased and light changed to a quick flashing white light (asked for by Shipping Federation) ($17,250).

Father Point: Most powerful illuminant to be provided and characteristic changed to quick flashing; also that light be screened to clear Cock point shoal to the eastward (asked for by Shipping Federation). ($17,250).

Cape Dogs: Lighthouse and fog signal. At present there is no light on the north shore from Prince shoal to Cape Salmon, a distance of 15 miles (asked for by Shipping Federation; also by general manager Richelieu and Ontario Navigation Company) ($10,000).

Quebec harbour: Illuminating power to be increased. At present these lights are absorbed by the city's lights (asked for by Shipping Federation) ($75).

Lark reef, mouth of Saguenay: Gas buoy to replace red conical buoy on S.E. part of the reef (asked for by Richelieu and Ontario Navigation Company). Capt. Koenig says it would be very useful, and Mr. Gregory concurs. Capt. Koenig also reports that the only buoy that will stand upright in this current is type called No. 1B form; of which there are none in stock ($100). Commissioner of lights says if it will be necessary to get one of this class of buoy the cost will be more, as one will have to be purchased.

Point Amour: To complete work unfinished at close of navigation (asked for by assistant chief engineer). No estimate given. It is included in a bulk sum for unfinished work.

Cape Rosier: To complete work unfinished at close of navigation (asked for by assistant chief engineer). No estimate given. It is included in a bulk sum for unfinished work.

Saguenay river, Grosse Roche, Rivière du Moulin: To complete contracts and rebuilding range lights (asked for by assistant chief engineer) ($3,600).

Cape Norman: New dwelling for keeper. Resident engineer at Quebec reports this absolutely necessary. Asked for by assistant chief engineer ($2,000).

Small Lights: Small harbour and fishing lights, as may be considered most important by Lighthouse Board. Asked for by assistant engineer. ($3,000).

General account: Superintendence of works, salaries of local engineers, travelling expenses, agency officials and general repairs, as may be found necessary; asked for by assistant chief engineer ($20,000).

IV. Total, $433,575.

Aids to Navigation wanted in British Columbia—Supported by Mr. Sloan, M.P.—April 26, 1906.

Submitted for approval of Minister of Marine and Fisheries, April 9, 1906.

Estevan Point, Vancouver Island.—First-class light wanted. Asked for by Mr Sloan, M.P., who came before board. To be noted for discussion with minister Referred to chief engineer.

Middle Bank, Strait of Fuca.—Lightship equipped with the most powerful ligh fog alarm, and wireless telegraphy. Asked for by Mr. Sloan, M.P., who appeared befor board. To be anchored about 15 miles out. Referred to chief engineer.

Cape Beale.—Fog alarm. Agent in British Columbia to experiment with boom as suggested in report of chief engineer. Chief engineer to make personal examina tion of sites between Cape Beale and Carmanah and report on best one, where a first order dioptric light and fog alarm is to be installed. Referred to chief engineer.

Pine Island.—Mr. Sloan, M.P., brought up the matter of a new tower at thi place, and was informed by the chief engineer that the matter is being attended t

Ballenas.—Light asked for at this place by Mr. Sloan, M.P.; also recommende by Vancouver S.M. Association. What is wanted is an improved light, so as to b visible all round, and a fog signal installed. Agent, British Columbia, to be aske for report.

Lund.—Light wanted. Asked for by Mr. Sloan, M.P., who intimated that it i very important.

Pitchen Sound.—Mr. Sloan, M.P., asked for a beacon here at the request of Cap Hughes, who navigates in the vicinity. Agent, British Columbia, asked for report.

Zero or Paddle Rock.—Whistling buoy wanted. Asked for by Captain Hughe who navigates in the vicinity, through Mr. Sloan, M.P.

Carslake Point.—Whistling buoy wanted. Asked for by Captain Hughe who navigates in the vicinity, and recommended by Mr. Sloan, M.P. Agent, Britis Columbia, asked for report.

Alfred Reef.—Bell buoy wanted. Asked for by Captain Hughes, through M Sloan, M.P.

St. Mary's Island, Quebec—New Fog Alarm and Light Station.

St. Mary's Island, Quebec.—Assistant chief engineer asked for $20,000 for a ne fog alarm and light station; also a dwelling. Mr. Allan intimated that Captai Vipond reported unfavourably on this. Stand; no action.

Bryon Island.—Assistant chief engineer asked for $15,000 for a new fog alarm at this place Stand; no action.

Port Daniel.—Lighthouse applied for by petition, through Mr. Marcil, M.P. who strongly recommended same. To stand.

Shipping Federation ask that a Lightship with Fog Whistle be placed on Morin Shoal

Morin Shoal (near Murray Bay)—The Shipping Federation asked that a light ship with fog whistle be placed here. Inquiries to be made about a suitable vessel o buoy. Referred to the Commissioner of Lights for necessary action, 26-4-'06.

Other Extensive Demands by Shipping Federation.

Montreal Harbour.—The Shipping Federation asked that the ledges, reefs an shallow water within the harbour be buoyed; that entrance lights be established o the guard and Victoria piers, and a screened light put on Isle Ronde, which will show

when a vessel comes abreast of the Heney carriage factory. To be brought to the attention of the Montreal Harbour Commissioners, who look after the lights in the harbour. Done, 26-4-'06.

Montreal Harbour.—The Shipping Federation asked that the range lights at Hochelaga be raised a sufficient height to be visible as soon as a vessel goes within the line of range, and the lanterns and illuminating power be increased. Mr. Boucher communicated with, 26/4/06.

Cap Rouge.—The Shipping Federation asked that a light be placed on the north pier of the Quebec bridge. Bridge Company to be asked to do this. Done, 26/4/06.

Nicolet to Champlain.—The Shipping Federation asked that the necessary changes in range lights be made to mark the improvements just completed in the channel between these points. This is being done.

Isle aux Raisin.—The Shipping Federation asked that 3 buoys be placed to mark anchorage at this place. Mr. Boucher communicated with, 26/4/06.

Red Island and Princess Shoal.—The Shipping Federation ask that an additional high gas buoy be placed on the north end of Red island bank to enable mariners to use this channel, which is 2½ miles wide and saves two crossings. Mr. Gregory asked for report. Done, 1/5/06.

Murray Bay to Quebec—Aids to Navigation suggested by Shipping Federation.

Murray Bay to Quebec.—The Shipping Federation ask that the range lights Goose cape, Cape St. Joseph and Cap à l'Aigle be made distinctive. At the present time they are very much alike, and it is difficult at times to be sure of the one visible.

(*a*) Cap Salmon to head of North Traverse.—That this part of channel be marked by a distinct range of lights—2 traverse lights, as at present.

(*b*) Head of Traverse to Pillars past Channel Patch.—The Shipping Federation asked that this part of channel be marked by range lights at L'Islet, the front light to be placed on the wharf.

(*c*) The Pillars to Crane Island. The Shipping Federation recommend that this part of channel be marked by range lights; front light on pier now nearly completed; high light on Crane island wharf.

(*d*) Beaujeu Bank.—Shipping Federation recommend that this part of the channel be marked, after dredging, by range lights near St. Thomas bank and St. Thomas point.

(*e*) Crane Island to St. Laurent Wharf d'Orleans.—The Shipping Federation recommend that the channel here be marked by a range of lights at each end of the tangents.

Referred to chief engineer for report, 22-5-06.

Ontario.

False Ducks, Lake Ontario.—Gas buoy asked for for deep-water boats. Petition from Canadian Association Masters and Mates, February, 1905. Stand; no action.

Kennedy Shoal, Georgian Bay.—Gas buoy asked for by petition from Canadian Association Masters and Mates, February, 1905. Stand; no action.

Eastern Gap, Toronto.—That lights here be improved. Asked for by petition from Canadian Association Masters and Mates, February, 1905. Chief engineer announced that there is no necessity for this, since the new lighthouse is being built there.

Port Dover.—Buoy asked for reef on southeast side of breakwater. No action; stand until application renewed.

Port Lewis.—Gas buoy. This has been placed.

Rainy Lake.—Range lights asked for at Sand bay, above Pithers rapids. Light at Pithers point and a light and range on mainland below Pithers rapids. Asked for by captains of tow boats operating on lake. To stand. Mr. Nash, agent of department at Rat Portage, so advised, 17-4-'06. (?)

Minnicog, Georgian Bay.—Beacons leading into this place to be kept lighted at night. Asked for by Mr. Jas. Playfair, Midland, in February, 1905. Stand until application renewed, March 31, 1906.

Bronte Harbour, Lake Ontario.—Light on pier. Stand; no action.

Goderich Harbour.—Gas buoy wanted outside breakwater. Asked for by contractors of breakwater and mayor of Goderich. Stand.

Nine Miles Point.—New light wanted. Done; no action.

Cobourg, Ont.—Light keeper applied for a Chance lens lantern (red) for west pier. Stand; no action.

Port Dalhousie.—Fog horn for pier asked for by petition from Canadian Association Masters and Mates in February, 1905. Stand; no action.

Graham Shoal, off Duck Island, Lake Huron.—Gas buoy asked for by petition from Canadian Association Masters and Mates, February, 1905. Stand—no action.

Red Rock, Georgian Bay.—Fog alarm asked for by petition by masters of vessels trading on the bay, 1898. Reported against by chief engineer in 1902. Application renewed, 1905, by petition, and recommended by lightkeeper; also by Mr. Watson, M.P. Stand—no action, unless application renewed.

Kitchener Island, False de Tour, Lake Huron.—Light asked for by petition from captains navigating in vicinity. Recommended by chief hydrographer. Mr. Dyment, M.P., presses for it also. Stand.

Niagara-on-the-Lake.—Lighthouse and fog alarm asked for by Dominion Marine Association. Stand.

Niagara Shoal.—Gas buoy asked for. Stand.

Cape Hurd Channel.—Channel to be marked by buoys. Asked for by petition from mariners in 1902. Application renewed in 1904 by Mr. J. E. Campbell, Hepworth, Ont. Stand—no action, unless application renewed.

Agate Island.—Lighthouse asked for by Mr. W. C. Fremlin and Mr. J. J. Kehoe, Marksville. Chief engineer: that lighthouse on North Sister rock had been removed to West Sister rock, and there is no need of the Agate Island light. No action.

Meldrum Bay, Lake Huron.—Lighthouse asked for by petition sent through Mr Dyment, M.P., who recommends same, March, 1905. Stand.

Pelee Island.—North end light. Discontinue light. No action necessary.

Spruce Island, Parry Sound.—Permanent pier proposed by assistant chief engineer The building of this to stand over.

New Brunswick.

Negro Head, Pisarinco harbour: Spar buoy to be replaced by bell buoy. Asked for by petition in 1904.—Stand—no action.

Machias, Seal island: Fog alarm, improvements suggested by Mr. Thomson Schmidt and Mr. D. J. Stevens. Referred to chief engineer, 21-5-06.

Wilmots' Bluff.—Extensive repairs required, reported by agent St. John. Referred to chief engineer, 21-5-06.

Montgomery island and Dalhousie wharf.—Improving range lights. Inspector of lights suggests changes. Referred to chief engineer, 21/5/06.

Kouchibouguac.—Range lights asked for by petition sent through Mr. LeBlanc, M.P.—Stand.—No action unless revived again.

Purdy's Turn, Jemseg river.—Lighthouse asked for by petition.—Stand—No funds —interested parties so advised, 2-5-06.

Burton, Sunbury county.—Light asked for by W. Johnson. Reported on unfavourably by agent St. John.—Stand.—No action.

Cherry island: St. John agent suggests improvements in fog signal. Chief engineer not in favour of any change.—Stand.

Nova Scotia.

Guyon island: Fog alarm asked for by shipmasters and also brought to attention of department by Mr. A. Johnson, M.P.—Stand.

Grand Passage.—Dwelling for keeper.—Being done.

Green Island, Holly Point, Bickerton: Capt. Johnson says these lights ought to be changed as they are misleading in misty weather.—Stand.

Kidston Island: Asked through Mr. McKenzie, M.P., that lighthouse be elevated. Superintendent of lights in Nova Scotia says light is high enough, but it might be improved.—Stand.

Neil's Harbour: Pole light wanted on end of breakwater.—Stand.

Margaretsville Annapolis county.—Fog alarm asked for by Mr. Pickup, M.P. Superintendent lights reports that interests of general navigation do not call for one, and in this the agent, Halifax, concurs.—Stand.—Mr. Pickup advised, 2/5/06.

North Ingonish, Victoria county.—Light asked for by D. D. McKenzie, M.P. Superintendent of lights reports favourably and chief engineer supports same. Owing to many more pressing wants this must stand over.—No action.

Point West Bay, Richmond county: Petition for light sent through Finlayson, M.P., who recommends same. Superintendent of lights reports that necessity for light not pressing.—Stand. Mr. Finlayson so advised. 2/5/06.

Herring Cove, Halifax county: Roche, M.P. and Carney, M.P. ask for a light on the breakwater. Superintendent of lights favourable to one, but chief engineer says light already there answers all requirements.—Stand until more pressing needs are satisfied. Roche and Carney so advised. 2/5/06.

Cumberland Basin: Two small range lights northwardly from Amherst Basin pier asked for by Logan, M.P. Reported on favourably by superintendent of lights. Must stand for more pressing aids to be attended to first.

Minudie.—Light recommended for Barrowfield head.—Stand.—No action.

Louisbourg harbour: Submarine bell for.—Stand—no action.

Yarmouth harbour: Cat Rock bell buoy to be replaced by a gas and bell buoy.

Ships' stern.—Bell buoy of American type to be substituted for present Canadian buoy. 'B. of T. Yarmouth ask for these changes.—Stand.

Windsor: Dr. Black, M.P., recommends that Dominion Atlantic R. R. bridge be lighted. D.A.R. asked to carry this out as promised. 2/5/06.

Upper Kemp Head, Big Bank shoal, Frasers' point: Three places are identical. Lighthouse asked for by petition through E. D. McKenzie, M.P.—Stand—no action until revived.

Sydney Harbour: Shipping Federation ask for a whistling buoy at Petries Ledge. Gas buoy for Livingstone shoal. Ditto near South Bar.—Stand.

Egg Island: Fog signal asked for by Shipping Federation. To be taken up when money is available.—Must stand for present.

Buoys: Shipping Federation recommend that all buoys be repainted and relettered at least once every year. Chief engineer explained that cause for complaint would be removed now that the department is getting another steamer for this agency.—No action.

Cape Fourchu (fog alarm): Oil plant recommended to replace steam plant by assistant inspector government steamers. Referred to chief engineer. 21/5/06.

Island Harbour, Guysborough county: Light asked for by petition sent through Sinclair, M.P., who recommends same. Superintendent of lights suggests Darby Point. Stand—Sinclair, M.P., informed verbally of decision of board, 28 April, 1906.

Louisbourg: New diaphone for fog alarm. Referred to chief engineer, 21/5/06.

Rankin's Island, Argyle harbour: Light asked for by petition through Law, M.P. Superintendent of lights reports favourably, but chief engineer not impressed with necessity for one.—Stand—Mr. Law, M.P. so advised. 2/5/06.

Red Bank, Avon river: Light asked for by petition sent through Dr. Black, M.P. who recommends same strongly. Report of agent Halifax not received at date of this meeting. Hold until report received.—No present action.

Prince Edward Island.

Charlottetown harbour: Range lights petitioned for by masters trading there and reported on favourably by the agent.—Stand.—No funds at present. Agent and petitioners so advised. 3/5/06.

June 1, 1906.—Meeting. Present: Chairman, Spain, J. F. Fraser, B. H. Fraser

Nova Scotia ($1,450).

Jordan breakwater, Shelburne tower light, 7th order dioptric asked for by wharf inger through Cox, M.P.P., who forwards same through Hon. Mr. Fielding. Recommended by superintendent of lights, Halifax, ($700).

Island Harbour, Northwest point: Tower light 7th order dioptric asked for by petition sent through Sinclair, M.P., who recommends same, ($700).

Dimock's point, Hants county: Light asked for by petition sent through Dr Black who recommends same.—Recommended by superintendent of lights, N. S. What is required is to attach tower of Windsor electric light on a pole ($50).

Hantsport: Buoy (gas and bell) to be placed at tail of bar; asked for by petition through Dr. Black who recommends same, also recommended by superintendent of lights.—No cost, have one in stock.

Quebec ($3,075).

Port Daniel, west: Lighthouse applied for by petition through Marcil, M.P., who strongly recommends same. Agent Quebec says: A light would be very useful in the general interests of navigation. Resident engineer, Quebec, says: No engineering difficulties in the way. Tower, $700; lantern, $575; freight and erection, $100; lens occulting light, $700 ($2,075).

V. Total $3,525.

October 10 and 11, 1906.—President, chief engineer, acting chairman; Spain, J. F. Fraser, H. A. Allan, Captain J. W. Troup. The chief hydrographer appeared before the board and outlined a scheme for lighting the approaches to Prince Rupert which will be made the subject of a separate report. The board met 10th inst. 10.50, adjourned 4.30 p.m. 11th at 10.15 a.m., adjourned 3.50 p.m.

Prince Edward Island ($6,580)

Charlottetown harbour: Range lights asked for by petition to be placed on W ren's farm, recommended by Lloyds' agent Prince Edward Island, also by agent department, ($830).

Souris: (main sea light).—Mr. Hughes, M.P., asks that it be changed to a flash light. Agent department recommends this. Light to be made occulting and power of lamp increased ($1,000).

Lennox Island: Range lights to guide the Indians in from their fishing grounds on dark nights. Asked for in petition sent through Indian Department, recommended by agent, ($250).

Miscouche shoal, off Summerside: Captain Cameron, of *Empress*, which plies here asks for lighted buoy.—Recommended by agent ($4,500).

Gaspereaux shoal, off Graham shoal: To remove present steel can buoy at Miscouche to this place when lighted buoy goes to Miscouche.—No cost.

Nova Scotia.

Digby Gut: Gas buoy to be placed off lantern point (Digby Gut). Have one in stock. Col. Anderson dissenting, saying that entrance is perfectly clear of danger, and is already marked by a good light and fog alarm on land.

New Brunswick ($7,600).

Point Lepreaux: 3rd order flashing light. Agent says this is one of the most important and dangerous places for steamers running up Bay of Fundy, ($7,000).

Wilmots Bluff: Small tower light to replace mast light. Recommended by agent and chief engineer, ($600).

Ontario ($6,800)

Port Burwell: Red light on end of pier, ($200).

Northport Shoal, Bay of Quinté. Gas buoy asked for by Richelieu and Ontario Navigation Company ($3,500).

Welcome Island, Thunder Bay, Lake Superior: 2nd class fog alarm (can use machinery that came out of Thunder Cape). Asked for by Port Arthur Board of Trade and also by Mr. Conmee, M.P., for building, ($2,000).

Way shoal, below mouth of Blanche river: 4 range light, ($500).

Lanterns for same (this is in the Ottawa river, and the chief engineer already has the minister's authority for erecting these lights), ($100).

British Columbia ($166,820).

Paschena Point (Beeghados Point): 1st order lighthouse, 1st order fog alarm ($10,000); 1st order lighting apparatus ($25,000).

Boat Point, Sarah island: Unwatched light. Vancouver Shipmasters Association asked for this, ($2,000).

Point Atkinson: 3rd order quick flashing light (small model). Recommended by commissioner of lights after inspection, ($4,350).

Middle Bank, Strait of Fuca. Lighted whistling buoy with bell, ($8,500).

Zero Rock, Rivers inlet: Unwatched light (Captain Troup remarked tha should be done right away), ($2,000).

Dodds' Narrows. Red light (Vancouver Shipmasters Association asked for ($1,000).

Whiffin Spit, Sooke harbour: Department to pay for upkeep of this ligh present fishermen maintain it. Fraser River canners ask department to tak of it, ($120).

Plover Point, Mosquito harbour, Clayoquot sound: Unwatched light to b nished; single wick lamp will do. Capt. Townshend will keep light going ($5

Klunugget, Grenville channel: Day beacon painted white ($200).

Ballenas: Light to be shifted to end of island (moving tower), $400; inst fifth order flashing apparatus, $2,500; fog alarm previously in use by the depar or Daball trumpet in use by United States, $2,000 (cost of building). Mach $1,000 = $5,900.

Yellow Island: Foghorn previously used by department or Daball trumpet by United States. Cost of building, $2,000; machinery, $1,000 ($3,000). alarm is already authorized at this place. This is to get authority to install a c type.

Sisters: Fog alarm previously used by department or Daball trumpet. C building, $2,000; machinery, $1,000.

Cape Beale: Fog alarm, 3-inch diaphone. Machinery, $9,000; building, $ installation, $2,000 ($15,000).

Comox Bar: Gas and bell buoy. Vancouver Shipmasters' Association aske something here ($4,000).

Spanish Bank: Remove present bell buoy from Comox Bar to this place. I River canners ask for bell or whistling buoy here.

West Rock or Clark Rock, Gulf of Georgia: Unwatched light, or plac beacon, to be built on Clark Rock ($2,000).

Carmanah: Third order of light to be installed. Fog alarm to be impro possible ($14,000).

Esquimalt: Fog alarm 10,000 blow bell. Nanaimo pilots complain that a sent there is no guide to lead them in ($500).

Cape Mudge: Larger reflector to be put here to show down gulf. Captain says that at present light cannot be seen further than six miles out in gulf ($

Chatham Point: Bell buoy on Beaver Rock with tide bell attachment ($5

Christie pass: Light to be made white with red sector only over Noble i ($50).

Fog rocks, Fitzhugh sound: Unwatched light. Col. Anderson in favour of house with watched light ($2,000).

Swan rock, Rivers inlet: Spar buoy ($25).

Gibson island, entrance to Skeena: Spar buoy ($25).

Tree Bluff, Chatham sound: Iron buoy off end of spit ($300).

Skidigate: Iron buoy ($300).

Lucy island: Hand foghorn ($25).

North Skeena passage: Buoy on rock between Inverness cannery and Pacific cannery; chief hydrographer to place this next year—No charge.

Village island: Beacon on rock outside Village island, Port Essington ($8

North Skeena passage: Small iron buoy on rock between Inverness canner North Tree point; chief hydrographer to look after it ($300).

Gibson reef, off Gibson island: Unwatched light, Watson rock ($2,000).

Walbeau rock, Pointer island: Steel buoy ($300).

Morning reef, Klawnugget: Unwatched light ($2,000).

Ledger's reef: Gas buoy on reef off McNeill's point, Mr. Haddington island ($3,500).

Ripple shoal: Can buoy ($300).

Race point, Porlier pass: Increasing arc of front light in Porlier pass to make it visible all round ($150).

Siwash rock: Spar buoy ($25).

Victoria: Beacon lights in harbour to be attached for electricity with cable recently purchased from the War Department; laying cable ($100).

Prospect bluff: Installing fog alarm at lighthouse ($5,000).

Sands head, Fraser river: Lighthouse to be moved out to point ($3,000).

Sands head, Fraser river: lighted buoy to be placed at point temporarily until lighthouse moved ($10,500).

VI.—Total, $187,300.

February 6, 1907.—Meeting. Present: Chairman, Chief Engineer, Spain, H. A. Allan and W. H. Noble, in absence of Commissioner of Lights. The following gentlemen appeared before the board to plead the merits of the various applications: Dr. J. B. Black, M.P., Hants county, N.S.; D. Finlayson, M.P., Richmond county, N.S.; Michael Carney, M.P., Halifax; Mayor McIlwreith, Halifax; Mr. Bell, president Halifax board of trade. Mr. A. N. Maclean, M.P., Lunenburg, was notified when the meeting would take place, but he found it impossible to be present. The following departmental officials were present: Mr. Lord, Charlottetown; Harding, St. John; Hutchins, Superintendent of Lights, N.S., Kelly, Superintendent, N.B.; O'Farrell, Inspector Lights, Quebec, and Captain Koenig, master C. G. S. *Druid*. Board met 10.30 a.m.; adjourned 5.30 p.m.

Nova Scotia ($33,300).

Mitchener's point, Avon river: Small light asked for by Dr. Black, M.P. Tower and building, $600; lantern and apparatus, $200; land and right of way, $100 ($900). Tower, 4 feet; lantern, 7th order lens.

Madam or Big island: Instead of a lighthouse as asked for on the south end of Janvrin island, the board decided to put a combined gas and whistling buoy on the Cerberus instead of whistling buoy authorized by the board March 31 last. Cost of combined gas and whistling buoy, $6,000. The board also decided to place an American bell buoy on Peninsular shoal, instead of the combined gas and bell buoy recommended by Superintendent of Lights; in stock, no cost.

Fourchu harbour, Richmond county: Light asked for by Finlayson, M.P. Wooden tower, $1,000, and 5 ft. wooden lantern; 7th order apparatus. Also decided to shift the bell buoy here to mark Pot rock as soon as lighthouse is established.—Apparatus in stock, no cost.

Petit de Grat, Richmond county: Back range light, recommended by Finlayson, M.P. ($1,000).

Cole harbour, Guysborough county: Establishment of small inner harbour light in Mr. Munro's house there. No cost for instalment; maintenance, $50 per annum.

Cape George, Antigonish county: New lighthouse, 10 ft. lantern, 3rd order quick flashing light ($10,500).

Halifax harbour: The question of replacing the buoys in the harbour by a lightship was allowed to stand until new large buoy is tried.—No cost, one in stock.

Dartmouth: New lighthouse. Decided that steps should be taken to secure the

land recommended by Mr. Hutchins for site this year, and that an estimate be sub mitted to the board of the cost of a steel skeleton tower, for future consideratio Land required for new tower to be built later ($200).

Shelburne harbour: Bell buoy to replace can buoy on 'Jig rocks' ($700).

Glace bay: Range lights and spar buoys. Asked for by A. Johnston, M.I ($2,000).

Mabou harbour: The recommendation of the superintendent of lights, *i.e.*, th two new range lights be built here was approved by the board, and matter will l referred to chief engineer for working out of details.

Cape Sable ledges: A combined gas and whistling buoy on S.W. ledge. Ask for by Mr. Fielding ($10,000).

Port Greville, Cumberland county: Range lights. Asked for by Mr. Logan, M.I ($1,000).

Prince Edward Island ($17,000).

Panmure island, at entrance Georgetown harbour: A second-class diaphone buil ing and apparatus. Asked for by Hughes, M.P. ($10,000).

Entrance to Murray river: Whistling buoy to be moved from Indian rocks Murray river entrance.

Indian rocks: Small sized gas buoy to replace present bell buoy ($3,500).

Point Prim: Small sized gas buoy to replace present bell buoy ($3,500). The three asked for by Hughes, M.P.

New Brunswick ($74,250).

S.E. end Partridge island: Combined gas and bell buoy. (Agent N.B. asks f this.) Exact location to be arranged by the agent, captain and pilots—In stock, cost.

Long Point, Belle Isle bay: Small pole light, land mast and lamp ($300).

Mispec harbour: An electric light on one of the ends of the breakwater. Ask for by agent. (Carried on basis of cost.)

1. East Head, Musquash: Fourth order apparatus (modern quick flashing light Present lantern on a new tower and repairs. Asked for by agent N. B. ($5,000.)

2. Cape Spencer: Fog alarm, $10,000; lighthouse tower, $3,000; telegra apparatus, $2,000. (Mr. Stockton, M.P.), ($15,000).

Heron islands, L. station (Restigouche river): Removal of tower and placing on new foundation ($400). New lantern and fourth order lens with petroleum vapo lamp, to be provided out of stock. Asked for by Inspector of Lights, N. B.

Relief L. S. to replace *Lurcher*. Decided by the board that the L. S. *Anticos* should replace *Lurcher* when that vessel is repaired next winter. The details of th arrangement to be settled in department. (*Lurcher* file is No. 20198 M.)

Gannet Rock: First-class diaphone. Machinery, $10,000. building, $10,0 ($20,000). The board decided that in the intervening time bombs be fired off eve five minutes during a fog. Asked for by St. John board of trade.

North-western ledge off Brier island: Automatic gas and whistling buoy. (John board of trade.) ($9,000.)

Southwest ledge, Brier island: Automatic gas and whistling buoy. (St Jo board of trade.) ($9,000.)

Round reef, St. John harbour: Spar buoy on south side of round reef ($50).

Swallow Tail light, Grand Manan: Light to be changed from fixed to revolvi ($500).

Beacon light, St. John harbour: To be improved to an occulting white light. (Asked for by St. John agent.) ($500.)

Wilmot's bluff light: New site of lighthouse and 7th order apparatus. (Asked for by St. John agent.) ($1,000.)

3. Cape Jourimain light, Northumberland strait: To be improved to 4th order quick flashing light ($2,000). Stronger light asked for by N. B. agent.

4. Miscou light, Bay des Chaleur: New lantern and central panels of 3rd order, double flashing apparatus. Improved light asked for by agent, N. B. ($5,000).

5. Escuminac light: To be improved to 3rd order flashing light, to be used in present French lantern. Details to be arranged by Commissioner of Lights. Cost apparatus. (Asked for by N. B. agent.) ($6,000.)

Portage island light, Miramachi river: To be improved to a revolving white and red light or a 4th order occulting apparatus. (Asked for by agent.) ($500.)

6. Flower island: Central rings, 3rd order apparatus to be placed in present lantern and tower. Already provided for, but only authorized by the board now. (Asked for by Commissioner of Lights.) ($2,000.)

Quebec ($23,700).

English point, English bay: Lighthouse asked for by W. M. Dobell, Quebec; also Shipping Federation.

Point Echourie light: Moving present tower and making a more distinctive light ($1,000). Recommended by Inspector of Lights and by agent, Quebec.

Bicquette fog alarm station: Machinery for duplicating fog alarm, $8,000; chge. building, $2,000 ($10,000). Modern quick flashing apparatus and new lantern. (Old fog alarm in very bad condition and new lighting apparatus is necessary.) ($10,000.)

Morin shoal, near Murray bay: One of the old L. Ss. on Lake St. Peter is to be utilized to mark the shoal. No cost.

Red island L. S., River St. Lawrence: To be kept where she is and a large can buoy is to be located at her former station. Can buoy in stock.

Ile Vache Marine, Esquimaux point: Two small pole lights. (Asked for by Girard, M.P.) ($400.)

Moisie river and bay of Seven islands: A buoy at entrance to bay of Seven islands. In stock, no cost.

Magpie, north shore (Gulf St. L.): Two pole lights. (Asked for by Girard, M.P.) ($300.)

Part II. appears as an addendum to these recommendations. It includes items or applications, numbering 35, which were either refused or held over. Some other unimportant matters were put under way.

VII.—Total $148,250.

March 6, 1907.—Meeting—Present: Chairman, Chief Engineer, Spain, J. F. F., Allan, B. B. Kelligher, chief engineer G. T. Pacific, and C. J. Smith, G. M. R. and O. Nav. Co. were present; also W. J. Stewart, Chief Hydrographer; U. P. Boucher, agent, Montreal. Board met 10.45 a.m.; adjourned 3.30 p.m.

British Columbia ($20,000).

Vicinity Prince Rupert, Marion rocks or Ellinor rock: Gas buoy to be established in the better locality after survey is completed this year, and a concrete masonry day beacon; the danger left unbuoyed. Gas buoy, $3,000; day beacon, $1,000 ($4,000).

For a lighthouse outside in best locality. Location to be decided after survey completed in the vicinity of Holland rock or White Top rock. Small lighthouse with dwelling; 5th order lens ($5,000).

Casey point: Range lights ($5,000).

Further aids ($6,000).

Quebec ($22,000).

Cap à l'Est: A single wick Wigham lamp; the R. and O. Nav. Co. under to maintain it without charge, as agents of department. One in stock, no co

Six gas buoys, $3,000 each, to mark the curves and tangents in Lake St. ($18,000).

Buoy Q45 to be replaced, to mark shoal opposite Cap Santé. In stock, no

Entry island, Magdalen islands: Light to be strengthened to 4th order le occulting light, $2,000; and a whistling buoy to be placed off eastern end of island. In stock—no cost.

Goose cape light: To be changed to a 4th order occulting light, $2,000.

Manitoba ($6,000).

Lake Winnipeg: Wigham light on piles at mouth of Red river. In stoc cost. Public Works to be asked to provide the group of piles to carry the lam

Warrens Landing (at the approach to): 2 pairs of range lights, $3,000

Balck river (approach to): Gas buoy recommended, if found possible, $3,

Newfoundland ($13,000).

Cape Pine: Fog alarm recommended by Shipping Federation. Mach $8,500; building, $3,500; installation, $1,000, $13,000.

Nova Scotia ($2,500).

Cumberland basin (head waters), Bay of Fundy: 2 small range lights wardly from Amherst basin pier. Asked for by H. J. Logan, M.P., $1,200.

Cape Sharp light: Light to be strengthened to 4th order lens and 25mm. leum vapour light, $1,000.

Eastern passage—entrance: Automatic buoy between Cape Negro island Black point, just outside of Budget shoal. Asked for by Mr. Fielding. In st no cost.

Island harbour light: To be changed from a fixed to an occulting light. R mended by Mr. Sinclair, M.P., $300.

New Brunswick ($22,000).

South point light, Brier island: Light to be made similar to that on G rock. Asked for by St. John (N.B.) Board of Trade. Change to be made as as possible, $20,000.

Ward's point, Westmoreland county: Small diaphone plant, $850; buil $1,150. Recommended by Mr. Emmerson, $2,000.

Ontario ($11,800).

Halfway between Windmill point, on Ile Perrot, and L.S. No. 3, Lake St. L Gas buoy, $3,000.

Brockville narrows—abreast of head of 1st island above Brockville: Gas $3,000.

Ottawa river: Small light for north side Jones' island, 7 miles below Car $800.

Port Dalhousie: Fog alarm. Recommended by Dominion Marine Associa $2,000.

Southampton: Gas buoy off north end of the 'Spit' from Chantry is $3,000.

VIII.—Total, $97,300.

Part II.—Consisting of 64 applications left over or put in way of being dealt with.

Meeting, April 17, 1907. Present: Chairman, chief engineer, Spain, J.F.F., H. A. Allan; also Joseph Girard, M.P.; Geo. Parent, M.P.; J. H. Sinclair, M.P.; Francis King, secretary Dominion Marine Association; James H. Hall, vice-president Ottawa Forwarding Company; Captain Clark, Ottawa Forwarding Company; Captain Noonan, manager Rideau Lakes Navigation Company. In the afternoon, the commissioner of lights moved, seconded by Commander Spain, that certain recommendations which had previously passed the board be reviewed. A difference of opinion having arisen between the chief engineer and commissioner of lights relative to certain technical points, the chief engineer thought he would submit his side of the argument to the minister. The chief engineer's memorandum has been prepared and is now in my hands. I propose to refer the chief engineer's objections back to the board, in order that the commissioner of lights may have an opportunity of replying to the same, when the whole question will be reconsidered.

Nova Scotia ($5,048).

Bass river, Colchester county: Small light on wharf. Recommended by Mr. Fielding, $800.

Cape Sharp: Fog alarm—increasing power of present alarm. Asked for by assistant chief engineer, $4,000.

New harbour: Courtney whistling buoy to replace bell buoy. Recommended by Sinclair, M.P. In stock.

Little Liscomb: Light contingent on favourable report from agent. Recommended by Sinclair, M.P., $2,000.

Iron can buoy, painted black, to be located about 1½ cables south of Horse rock. Recommended by superintendent of lights. No change to the buoy known as 'Spry Bay bell,' $300.

Gunning point, near entrance to Tanners pass, Black rocks: Small bell buoy. Recommended by A. K. Maclean, M.P., $474.

Grand river, Richmond county: Harbour bell buoy granted, provided department can maintain it (chief engineer dissenting). Recommended by D. Finlayson, M.P., $474.

Cape Argos shoal, eastern entrance Strait of Canso: Whistling buoy. Carried, contingent upon favourable report from inspector of lights. Recommended by Mr. Sinclair, M.P. In stock—no cost.

Quebec ($4,515).

Sault au Mouton: Two pole lights. Recommended by Girard, M.P., $500.

Ste. Anne de Beaupré and Cap Brulé Channel between: 2 ranges lights. Recommended by Parent, M.P., $4,000.

Gascons, Bonaventure county: Fog horn (hand). Recommended by Marcil, M.P., $15.

Ontario ($29,050).

Easterly end Pigeon island, Ottawa river: Wigham 30-day light. Tower lamp in stock. Contingent on favourable report from chief engineer, after inspection. Recommended by Dominion Marine Association, $200.

Sney channel, above Dickenson's Landing: To be buoyed, as in past years. Recommended by Dominion Marine Association. No cost.

Brighton harbour: Illuminating apparatus of outer pair of range lights to be strengthened. To be taken from Prescott stock. Recommended by Dominion Marine Association.

[illegible] Recommended by [illegible] Marine Association, $1.00.

[illegible] Recommended by [illegible] Marine Association, $5[illegible].

[illegible] $2.50; building, 4.00. Recommended by [illegible] Marine Association, $[illegible].

[illegible] Recommended by Dominion Marine Association [illegible].

[illegible] $2.50; building, 4.00. Recommended by the Dominion Marine Association, $[illegible].

[illegible]

[illegible]

[illegible] objections [illegible].

[illegible] Chairman [illegible]

[illegible] ($[illegible].50).

[illegible] recommended by agent, $1.00.

[illegible] $[illegible] [illegible]

[illegible] seconded by [illegible]

[illegible] Recommended by agent, $1.00.

[illegible] Recommended by agent and Captain [illegible]

[illegible] October [illegible] Suggested by agent and recommended by Captain [illegible], $[illegible].

[illegible] October [illegible] Recommended by Captain [illegible]

[illegible] building, $2.00; apparatus [illegible] $40. Recommended by agent, $2.40.

[illegible] $4.00; [illegible] $[illegible] provided for next year. Recommended by [illegible] Brewster, [illegible] $[illegible].

[illegible] of Haddington [illegible] Recommended verbally by Captain [illegible]

[illegible] necessary [illegible] possible [illegible] provided by department and maintained by [illegible]

ESSENTIAL APPENDIX.

[illegible] Trade Mining Company. Recommended [illegible] Trust. [illegible]

[illegible] Wagon and Recommended [illegible] Trust; $1,000.

[illegible] Recommended [illegible] upon [illegible] Trust, $[illegible].

[illegible] 1890.

[illegible] Trust Account. [illegible] Trust. [illegible]

[illegible] Trust. [illegible]

[illegible] 1890.

II.—Trust, $1,[illegible].

Part I.—4 applications were [illegible].

Recommendations of claims made by Board.

No. 1—June 11, 1906	$ 31.00
2—July 4, 1906	88.00
3—August 7, 1906	1.00
4—March 1, 1906	43.73
5—June 11, 1906	[illegible]
6—October 9 and 11, 1906	157.00
7—February [illegible], 1907	18.00
8—March [illegible], 1907	7.00
9—April 17, 1907	[illegible]
10—June 3, 1907	6.40
Total for five years	$1,01[illegible]
Average per year	$ [illegible]

[illegible]

[illegible] DEPARTMENT.

[illegible] the working of this department we have found great difficulty [illegible] what may be called whole news of morning. The letters to and from the different officers are not consecutively numbered and filed in chronological order, as [illegible] should be done. They are not numbered at all, but are arranged in files according to their subjects, and in the same files are placed copies of the replies made [illegible] with perhaps copies or originals of any positive instructions. This system [illegible] party to deal occasional demands from the members of [illegible] for complete files of letters connected with some matter which [illegible] morning mail. When such a demand is now made the requisite file of letters can be produced at once. The system is not a convenience to the officer [illegible] the correspondence, since it enables him with the easy possible trouble to see the whole previous history of the matter being dealt with. But if it has these advantages [illegible] than counterbalanced by the serious fact that almost anything [illegible] efficient supervision of the department becomes all but impossible. [illegible] the management of even the agency of the department might mean the [illegible] of [illegible] letters. Hence the great difficulty of obtaining whole news of morning.

The department is practically overwhelmed with correspondence—due to the errors [illegible] being sent to the department. Each letter has to be put on file to which it has reference, and that means a large work of the records staff of the department consisting of three officers. Every morning the files are distributed among the different officials to be answered. A minute being put on each letter. Referred to accountant [illegible] referred to chief engineer [illegible] referred to commissioner of lights [illegible] referred to Mr. Symmes [illegible] referred to —— the special name being filled in.

The system has been to assume that everything has to be formally settled by the head of the department—the deputy. Each letter has to be answered by some one in the department who is supposed to be in charge with the subject, or in any case to give his attention to it. A letter is prepared by him, but the deputy signs it, knowing often little or nothing about it, and having no time to inquire. Hit or miss the letter goes, and in many cases it is found later on that it was written in ignorance of or conflicting with previous correspondence or instructions, and therefore calculated to bring confusion and disorder in all concerned. But nobody is the wiser for all this. It is regarded as unfortunate perhaps, but more or less inevitable in the nature of things. Nothing nobody is consulted for it. The rush of unorganized work and the consequent jumble goes on as before.

While the deputy is nominally responsible for whatever is done in his department, the administration of the department shows that he is in point of fact held responsible for nothing. He is head of the department, assumes to regulate everything, but he regulates very little. His signature is necessary to all documents because the law requires it, but in his absence some other signature is perfunctorily supplied, and it is held to be just as well.

When things are decided upon, such as important contracts, requiring the most careful and serious attention, the papers are all duly signed and things are then allowed to take their course. Somebody or other is supposed to look after the business and in a kind of a way three or four or half a dozen people put their oars in at different times and places, each one being supposed to have some authority, because his title would indicate that; but they are as likely as not to clash with each other, or at any rate to produce anything but the result originally intended.

SESSIONAL PAPER No. 36

There are officers enough in the department, both inside and outside, to do all the work efficiently, if they were properly organized, but there is no efficient organization. The only attempt at it is the appointment of men whose titles would seem to indicate what their duties are, but those duties have never been specifically defined. There is no record of anything of the kind, and there are no written or printed rules and regulations known in the service. It is practically impossible to fix responsibility upon anyone. A nebulous organization is always forthcoming for everything that goes wrong. As is ignorance there is always more than one so-called responsible officer concerned, so usually three or four, there is no difficulty in explaining everything away.

LIGHTSHIP.

To illustrate the kind of administration that goes on in the department, we have a correspondence about some over-zealous two or three days of correspondence in connection with the *Lightship Lightship*.

1904.—In July, 1904, this lightship was being fitted out for her station, and the Quebec agent, under whose supervision she is supposed to be, writes to the deputy (July 15) requesting him to please furnish the lightship *Lightship* with a complete set of charts of the River and Gulf of St. Lawrence, a nautical almanac, admiralty tide-tables, log and engineer's log books, crosses, ship's log, stationery, compass for the ship as soon as possible. This letter is marked "Commander Spain, 20-7-04."

On August 4, nine days afterwards, the deputy writes back to the Quebec agent, instructing him to procure and send to *Lightship Lightship* first opportunity, the nautical almanac, also be good enough to send him a list of the stationery that is required for the lightship. The other supplies mentioned will be forwarded from Ottawa. A memorandum is made on for Mr. Walsh to this effect: "The following articles are required for the *Lightship Lightship*: 1 mate's log, 1 chief engineer's log, 10 crosses of ship's log."

On August 5 Quebec agent replies: "Your letter August 4. I beg to report that Capt. Cuillard was furnished with a few crosses of stationery here, but he asks that the department raise up what they think he will require. As I had to pay-lists in hand I could not furnish him with any. Will you please furnish these also. I have ordered a nautical almanac which I will send the *Lightship Lightship* first opportunity. Will you please furnish the other supplies asked for." Across the cover left corner of this letter was written in a very shaky hand: "Will the deputy minister please cause a list of stationery to be made out.—M. F. W."

On August 8 the deputy again writes Quebec agent: "I have given instructions that pay-lists be sent to your address. You will be good enough to send me a list of stationery supplies that this lightship will require, as it is impossible for the department to know what is wanted." This letter is initialed "O. G. V. S."

November 1—Quebec agent writes deputy: "Please inform me by return mail if possible when the *Lightship Lightship* is to leave her station for Quebec. I understood it was to be after November 15. The steamer *Aberdeen* will proceed below, Monday morning next, and could give the information in passing."

November 4—Deputy replies: "The vessel is to remain on her station as long as possible, having due regard to her safety, and taking into consideration that she is to winter in Lunenburg basin. You will instruct the captain of the *Aberdeen*, leaving Monday next, to give this information to the *Lightship Lightship*."

November 7—Quebec agent telegraphs that the *Lightship Lightship* has left her station for unknown reasons. Deputy replies: "*Lightship Lightship* must keep her station until close of navigation. Do everything possible to send her back promptly, and report reason for leaving without orders."

November 8.—Deputy instructs Gregory to get from captain of *Anti*
written statement why he left station without orders.

On the same day, the following letter went from the department to the
agent: 'Referring to my letter August 8, requesting you to send me a list of sta
supplies that this lightship will require, as the department does not know w
wanted. I have to remind you that no reply has yet been received to this comm
tion. You will please forward the list with as little delay as possible.'

*Gregory advises arrival of 'Anticosti' and gives captain's reasons for leaving s
Agent had no official information of captain's orders.*

November 11.—Quebec agent telegraphs and writes deputy: '*Anticosti* a
Captain reports, obliged to leave on account of shortness of chain and def
shackles. Believed it impossible to remain on station during present heavy we
after riding out some late storms. All his officers same opinion. Shall I prep
pay off crew and put ship in winter quarters? Engines require considerable re
Mailing report. Capt. Couillard states that he would not have left the station
the date fixed by Commander Spain, and given to him (15th inst.) but was oblig
do so for the reasons stated in my telegram. I had no official information of
orders.' Gregory, the Quebec agent of the department, 40 years continuously i
service, apparently cannot fit out a lightship without writing to the departme
Ottawa for every little thing required—things which he should know more about
any other man in the department or out of it. The people he asks for help (i
department) know less about it than he does, and they refer back to him. He
back on the captain; and the captain in his vague ignorance can do nothing bu
that the department make up what they think he will require. Instructions ab
matter of stationery for the vessel are bandied back and forth until the vessel had
her station for the season and was on her way back to Quebec. The last demand
the list of stationery being made on the Quebec agent by the department on the
day that the department was telegraphing all round that the vessel had left her sta
The captain apparently had orders from Commander Spain which neither the Qu
agent nor the deputy at Ottawa was aware of. Query; Under whose orders was
captain acting?

*Gergory complains of the Department ignoring him in giving orders to his
Subordinates.*

After it is all over the agent respectfully suggests, in the interest 'of the pu
service, and for the maintenance of discipline and order in this agency, that all instr
tions given to any officers in its employ, information of the same be given to me,
that I may take note of the same in my order book, as I do not trust such import
matters to my memory, and it would also prevent confusion.' This, after 40 ye
service.

Gregory on Ship's Condition.

November 11.—On same day Quebec agent writes (letter apparently not on fil
'It is quite evident that there is considerable to be yet learned and done before t
vessel (*Anticosti*) can be made perfectly reliable. She leaks considerably, above wa
line.'

Will require considerable overhauling of her engines and connections.

On her way up she bent one of her excentric rods, opposite Cape Chatte, abo
five miles off the land, and lost five hours trying to repair it. Had this occurred
her station during a gale she would have parted with her chain. Captain Couilla
says the chances are she would have gone ashore. She will require considerable ove
hauling of her engines and connections.

Suggests new method of mooring vessel, which he thinks would be the most reliable.

I would respectfully suggest some improved means of mooring that vessel, as I have no great faith in mushroom anchors of the size she carries. I understand they only weigh about 3,000 lbs. We moor some of our gas buoys with a 5,000-lb. sinker on what I believe is a better bottom than they have at Heath point, Anticosti. From my conversation with Commander Spain, I am under the impression that a very heavy dead weight in the shape of stone, with moorings that can be floated some way, so that the *Anticosti* can pick it up, would be the most reliable means of anchoring that vessel. (Commander Spain, 1-2-,'05; answered, 9-2-,'05.)

'Anticosti' goes into Winter Quarters.

November 11.—Deputy to Gregory: 'Place *Anticosti* in winter quarters. Pay off crew, except those required to look after ship.

Anticosti's cables to be entered free of duty.

November 16.—Gregory telegraphs Deputy: 'To save demurrage please send to me permit to pass entry for cables for *Anticosti* lightship.'

Deputy replies: 'Commissioner of Customs has telegraphed Collector to pass your entry cables for *Anticosti* free. Printed forms will be sent you by to-day's mail.'

Captain suggests change in hawse pipe.

November 18, 1904.—Captain Couillard writes to Deputy, through Quebec agent: 'I humbly suggest that some change should be made in the actual arrangement for the mooring of the *Anticosti* lightship. The present hawse pipe is laid at an angle of about 90 degrees, which makes it a very hard job to take in and out, and very dangerous and difficult to secure when the anchor is hanging at the hawse pipe. My suggestion would be that another hawse pipe be made with an angle of 45 or 50 degrees—then the chain would be lighter for the windlass to heave; and, having almost a fair lead the anchor would work in and out the hawse pipe without any aid. The windlass would be able to work an anchor much heavier than the one now in use, which is needed for the permanent anchoring of the lightship on her station.'

Heavier anchor wanted; should be at least 8,000 lbs.—Vessel should be docked, painted and seam and butt overhauled—Main deck, electrical apparatus, fog diaphone and many other things require attention.

The anchor should be at least 8,000 lbs. I suggest also that the lightship be docked and her bottom painted, and seam and butt overhauled as she leaks considerably about her top work. I understand all new ships leak more or less after heavy labour at sea, for a time. Such being the case with the *Anticosti*, I strongly recommend a good overhauling. The main deck also requires to be re-caulked. The electric apparatus also needs to be overlooked, as well as the fog diaphone, which has proved to be defective in regularity of sounding. I recommend all shackles to be clinched instead of iron pin in cross pieces of shackels. A watch or pilot house would be a good combination for the comfort as well as for the good maintenance of the watch in bad weather. The cabin also needs some alterations, and more room is required for the use of officers living in the cabin. Enclosed you will find a sketch of the bow of the lightship with her actual hawse pipe and the one suggested.

Gregory encloses above report and agrees in the main with it, but sees no reason for docking vessel—Wants to know what action to take.

November 23.—Gregory encloses above report and confirms it in such a way as to indicate that he may possibly have inspired it. About docking the lightship, however,

his letter dissents from the report and says: "I can see no reason for putting this v
into dock if she does not leak under the water line. I am perfectly well aware th
new vessels leak more or less from heavy labouring at sea, and such is d
is the case with the *Anticosti*. She will therefore require overhauling and re-caulk
The electric apparatus also requires to be overhauled and put in good working o
The fog diaphone has been found to be very defective also. Please inform me a
earliest possible what action to take in this matter. (Referred to Comma
Spain, 30-11-04).

December 1.—Deputy to Gregory: Your letter of 29th November (copy not gi
Make arrangements to put the *Anticosti* lightship into dock for a short period, so
enable her to be re-caulked for her next season's work.

December 1, 1904.—Gregory incloses log of *Anticosti* from November 11 t

Coal consumed by Lightship.

December 21, 1904.—Deputy wants to know what amount of coal was used b
Anticosti from the time she left Quebec till she returned to winter quarters
spend time and the average consumption of coal per day!

January 5, 1905.—Gregory's sort. replies: 287 tons, 103 days, 2¾ tons per

The captain's weak excuses for abandoning his station were apparently acc
without question or investigation; and the ship was put into winter quarters, w
programme for alterations and repairs drawn up by her captain and the agent o
department, which might not have been thought excessive for a vessel that had s
round the world, but for a comparatively new lightship that had been on duty
103 days, and lying at anchor the whole time, seems very extraordinary.

Gregory instructed to have vessel's engines and connections thoroughly overhau
Diagram showing how "Lurcher" lightship is moored.

February 9, 1905.—Deputy to Gregory. Instructs him to have the engine
connections of this vessel thoroughly overhauled as soon as possible, so as to enabl
to proceed to her station off Heath Point immediately at the opening of navigatio
regard to the moorings of this lightship I inclose for your information a dia
from Commander Spain of the way the *Lurcher* lightship is moored. These moo
have enabled this vessel to hold through the very severe gales of wind that have
raged on the Nova Scotia coast for the last two months; and it appears to the de
ment as the best means of mooring the *Anticosti*. You will have a copy made o
diagram and return it to Commander Spain as soon as possible.

Gregory writes about anchors but cannot get what is wanted.

March 3, 1905.—Gregory to Deputy.—Your letter 18th ulto (not given) author
me to buy 4 3-ton anchors for mooring the *Anticosti* lightship. I have the hon
state that I cannot find any 3-ton anchors, but I can get two Rodger patent an
comparatively new, weighing about 4,850 lbs. each. There are also some common
good) anchors here, weighing from 3,700 to 3,800 lbs. Will you please infor
whether you consider these anchors heavy enough for the purpose so that I may s
them at once, as at this season of the year there may be a demand for them else
—(Commander Spain, 7-3-05. Answered, 10-3-05.)

Instructed to buy three of the best common anchors, but if larger could be
would be better.

March 10.—Deputy to Gregory.—Your letter 3rd: "I have to instruct you t
chase three of the best common anchors you can for this vessel; 3,800 lbs. do
seem to be quite heavy enough, and if it is possible to get larger anchors the d
ment considers it would be better.

Captain Couillard writes upset about mooring of Lightship—Objects to Department's plan and offers his own instead.

April 6, 1906.—Captain Couillard to Gregory.—I kindly beg permission to express an opinion in regard to the mooring of the *Anticosti*. 'I understood that it is the good will of the department to moor the lightship with a bridle with 105 fathoms on each end of the anchors, a submarine buoy at the coupling of the chains, forming the centre, and a swivel and a single chain from centre to the ship. Considering the nature of the bottom, which is hard and rocky, and consequently not good holding ground, making it possible that the vessel drag one anchor towards the other and this would make it an ugly job. Furthermore, suppose they would hold, which is doubtful, it will be a very hard job to lift it in the fall on account of the heavy weather prevailing at that time of the season. My humble suggestion would be to have two anchors on same cable, 50 fathoms apart from one, and allow second anchor to be shackled 50 fathoms from first anchor. With this arrangement the ship would always ride on two anchors, no matter how the wind would blow. Should the ship drag she would not get her mooring fouled. With the experience I have gathered during my stay on the station two mushroom anchors and 200 fathoms of chain is sufficient to hold the lightship on her station in any kind of weather. The trouble arose last year from shackling of chains which were not properly secured. This year all the shackles will be clinched and made more solid. I will, nevertheless, faithfully carry out any instructions given to me, whatever they may be.

Gregory agrees and pretends that the plan is just what Commander Spain and he suggested originally.

April 6, 1906.—Gregory inclosses above to Deputy and says: 'This seems to me to be exactly the arrangement he started out with by the orders of Commander O. G. V. Spain last season, and personally I had faith in it, so had Capt. Couillard. He attributes the parting of his chain to bad shackling, especially in the matter of shackle pin bolt * * * * We have four mushroom anchors on hand and one 4,800 lbs. Roger anchor. Therefore, are well prepared for any emergency. The ship will have four anchors—two in use, and two spare on board. Please inform me whether this is approved of. If my opinion is of any value I must say that I second this manner of mooring the *Anticosti* lightship for the reason stated. I would not volunteer my personal opinion in this matter had not Commander Spain, through the telephone, spoken to me on this subject. Many years experience in providing moorages for steamers, lightships, heavy buoys, &c., is also an excuse for my offering an opinion upon a question in which I take as deep an interest as I would for anything else connected with the efficiency of the service of this agency; and Captain Koenig as well as all our other captains are of the same opinion. The handling of stockless anchors is very much easier than tying up two common anchors bridled together on poor holding ground, especially as the vessel does not winter on her station. Respectfully submitted and awaiting further orders. (Commander Spain, 11-4-05. Answered 13-4-05.) As this recommendation was in flat opposition to the judgment of the department as expressed in their letter of 9th February last, it had evidently to be urged with great diplomacy, but it was done successfully—the department climbing down as gracefully as possible.

Department agrees with the recommendation, and instructs accordingly.

April 13.—Deputy to Gregory: 'In regard to the mooring of the *Anticosti* lightship this coming season, I have to instruct you that in the opinion of the department the best manner of mooring this lightship would be to have two anchors on the same cable, about 50 fathoms apart. With about 200 fathoms of chain out there would be little danger of fouling, and she ought to be able to ride out any weather. I note that you have four mushroom anchors on hand and one 4,800 lb. Roger anchor, and are,

therefore, well prepared for any emergency. The ship will have four anchors (two
one and two spare) on board.' (Initialled in margin 'W.C.G.')

May 28.—Gregory advises that *Anticosti* left this morning for her station.

Was vessel put in proper order?

Apparently little or nothing had been done in the direction of the capt
suggestions for the improvement of the ship's equipment, except to purchase
anchors. There is no record of her engines and connections having been overhaul
as the agent intimated would be necessary. (See his letter of November 11 last).

October 9.—Quebec agent wants to know when the *Anticosti* will leave her stati

October 13.—The reply was given by Commander Spain—November 30—appare
it was still the department's habit to ignore the Quebec agent in such matters.

No further correspondence appears on this file until February, 1906, but in
meantime a new file had been started called '*Anticosti* repairs file.' The *Antico*
was apparently used during the season of 1906, to replace the *White Island* lights
until June; and did not get to her own station until the 25th of that month.
November 4 she again broke away from her moorings, lost her anchor, with
fathoms of chain and had to take refuge in Gaspé basin.

Vessel again compelled to leave her station—Investigation suggested.

November 10, 1906.—Gregory writes the department, after confirming the ab
news: 'The last message I received from Capt. Couillard is dated 9th inst.,
follows, viz.: 'Unable to return to station, having only 60 fathoms chain left, ple
wire me instructions what to do. Meantime taking coal.' As this is the second ti
that the *Anticosti* has lost her valuable mooring chain under the same master at ab
the same season of the year, I would respectfully suggest that this matter be thorou
inquired into, in order to ascertain whether there are means of preventing a rec
rence of the same. (Referred to Commander Spain, 14-11-'06.)

Department orders investigation.

November 14.—Deputy to Gregory, *re* letter 10th. 'This is the second time t
the *Anticosti* lightship has lost her anchors and chains at about the same season
the year. It appears to the department that there must be some carelessness on
part of the master, as our other lightship, the *Lorcher*, which is in a much m
exposed position, and with nothing like as good holding ground, manages to stay on
station. On the return of Capt. Couillard to Quebec you will hold a thorough investi
tion into the matter, making your report after you have heard all the evidence, as
the advisability of retaining Capt. Couillard in charge of this ship (initialled in mar
O.G.V.C.).

Report of Investigation.

November, 1906.—I. The windlass was too weak to lift the large amount of cha
it became absolutely necessary, owing to the weakening of the windlass and for
safety of the ship and the lives on board, to slip the chain and seek shelter in Ga
basin.

II. The hawse pipe is very unfavourably looked upon ever since the ship is
service, and I would respectfully suggest that its suitability be inquired into.

III. The boilers and condensing tubes are in need of overhauling and repairs.

The first engineer's evidence was that windlass proved unfit to wind in the ch
she was dragging. It is too weak for the work it has to perform. The chain mi
have been saved if the windlass had been stronger. (This engineer has only a
class certificate and cannot sign his name.)

The second engineer has only a 4th class certificate, and cannot sign his name rather. His evidence differs somewhat from that of the first engineer, but says it is on account of the latter's error. He agrees with him, however, as to the weakness of the windlass and the unfitness of the hawse-pipe.

No blame attaching to Captain Couillard, or his officers and crew.

November 21.—In inclosing the results of his investigation (21 Nov.) the agent writes that he obtained the sworn evidence of Captain Couillard, Calixte Bernier, first; Albert Boulanger, 2nd mate; F. Laverdiere, chief engineer; Zotique Larose, 2nd engineer, and Placide Boudreau, boatswain. I pressed all the questions to the witnesses as closely as possible and called upon them to declare upon oath whether they believed everything was done to retain the lightship on her station, and from their sworn evidence and statements I can see no reason to blame Captain Couillard for leaving his station and seeking shelter in Gaspé, and that no fault can be found with Captain Couillard or his officers and crew.

Department considers explanations satisfactory and instructs agent to have proper windlass supplied and hawse pipe attended to for next voyage.—
Anchors and Chains.

November 27.—On the 27th November the deputy acknowledges receipt of this report, and says 'the department considers that the explanations as given are satisfactory, and before the vessel goes into commission next season you will see that she is fitted with a proper windlass, which will be strong enough to lift her anchors and cable when a large amount of cable is out. You will also have the hawse pipe attended to and put in satisfactory condition. The department are in communication with Captain Schmidt in reference to the boiler and condenser tubes. You will be good enough to at once advise the department what length of chain is required and what weight and class of anchors are necessary for this ship so that they may be ordered immediately.' Initialled O. G. V. S.

It seems amazing that such a report should have been received by any one in the department as a satisfactory explanation. Figure Commander Spain being satisfied that the weak windlass was the cause of the inability to hoist the chain—to say nothing of the deputy or other officers of the department. Where was Captain Schmidt when the investigation was being held? Why was not he or some similar officer present to examine into the condition of the boilers and engines and the work of the engineers? Here even an outsider could have seen the chief trouble must have lain. Later on the chief engineer of the vessel was found to be an incompetent fraud and was dismissed without ceremony; and all the evidence to prove this must have been available to any one with eyes to see at the time of the so-called investigation.

Mr. H. A. Allan of Montreal, who was communicated with by the minister with regard to the lightship leaving her station, said he 'could not understand why a lightship in the position in which the *Anticosti* lightship is supposed to be located should find it necessary to leave her station by reason of heavy weather. I am inclined to think from what I have heard since I last had the pleasure of seeing you, that the people on the *Anticosti* lightship slipped their chain and went off to winter quarters.'

Chief Engineer drops on the file (perhaps by accident) and protests against the proceedings.—No action should be taken on evidence of men under investigation.

On the 17th December (three weeks after the department had expressed its satisfaction with Gregory's investigation) the chief engineer of the department writes: 'File No. 21040M., respecting *Anticosti* lightship, has just reached me and I would respectfully protest against going to the expense of putting a new windlass on the vessel, and against giving the agent such a free hand to make repairs without any

report from a competent inspector. I would point out, before any expenditure o changes in the vessel are made, that the windlass on the vessel is an improved Scotc windlass of the same quality as that on the *Lurcher* lightship which has never bee complained of, and the *Lurcher* is in a much more exposed position than the *Anticost* Moreover, I am surprised that action should be taken on the evidence of men whos conduct was under investigation, without hearing a word from the other side of th question.

If new crew were put on vessel, complaints would probably cease.

I think that if a new crew were put on the vessel the complaints would probabl cease. I am making this memo. as large repairs of this kind are charged against co struction vote, and I am certainly not satisfied that any expenditure in this is require except for new anchors and chains. In this case the expenditure was not referred t the accountant to be noted, nor to ascertain whether funds were available, and th amount required will be at least $5,000 if carried out, and possibly $10,000, as th whole bow must be rebuilt to put in new hawse pipes. (Initialled W.P.A., A.W.O. Stop this at once, F.G., 20-12-'06.

Deputy cancels his former instructions to Agent.—Chain and Anchors.

Dec. 24, 1906.—This memo. seems to have been somewhat of a shock to the deput as well it might. He immediately wrote to Gregory as follows, Dec. 24: 'Referrin to my letter 27th November authorizing a new windlass and hawse pipe for lightshi *Anticosti*, I have to advise you to take no steps to purchase a windlass or change th hawse pipe without further consulting the department and reporting on the cost. W are awaiting from you a report of what you can do in the matter of buying cable.'

C. T. Schmidt reports.

Dec. 26, 1906.—C. T. Schmidt, inspector of government steamers, was evident instructed at the same time to report on the windlass and hawse pipe, for he writes the deputy on Dec. 26, as follows: 'On the 21st inst. I made an inspection of the win lass, hawse pipe and forecastle head deck of the lightship *Anticosti* now lying the Lévis dry dock at Quebec. I then took all measurements, &c. for the propos change in the hawse pipe and moving of the windlass rendered necessary by suc change.'

Sees no fault in the windlass.

In my opinion the windlass is suitable, and in such condition as to render it ab to cope with any amount of chain in 20 fathoms of water. I may say that this windla is a duplicate of that on the lightship *Lurcher*; and for all the trouble that has be experienced in the mooring of this vessel I can find no single word which would le the department to believe that the windlass had not given every satisfaction.

Deputy writes Captain Koenig on the subject.

December 28, 1906.—The deputy apparently still looking for some support to t department's view of the *Anticosti's* windlass, wrote on December 28 to Captain Koen steamer *Druid*: 'I have to inform you that a statement has been made by the Capta of the lightship *Anticosti* respecting the windlass of the lightship; and the queti of supplying a new windlass of a different type is now being considered, and I ha to request you to inform me if you have any intimate knowledge of the windlass present on board the lightship, and if you have seen it work. I understood that y were on board the lightship for some time when she was first taken to Quebec a had an opportunity of forming an opinion as to the efficiency of the windlass. Ple inform me what your opinion is with regard to supplying a new windlass and haw pipe, after you have considered the matter carefully.'

Koeing replies that there is no need for change of windlass.

January 10, 1907.—Koenig replies to this January 10 : 'I beg to state that I was acting master of the *Lurcher* lightship on her voyage from Quebec to Halifax. The *Lurcher* and *Anticosti* lightships are sister ships. They are both alike as to the machinery and auxiliary power. The windlass of the *Anticosti* is comparatively new, and a powerful one. I do not see the necessity to condemn the windlass for a new one.

This ends the windlass dispute, but with no credit to the department.

Anchors and Chains.

January 14, 1907.—A memorandum signed by B. H. F. and initialled W. P. A. recommends that Mr. Schmidt be instructed to prepare specifications for the work of repair on the *Anticosti* which he has already outlined, and that tenders be invited. This was done ; meantime Gregory on January 17 writes the department about anchors and chains. He is offered a suitable 5,500 lbs. anchor at 5 cents per lb. and suitable chain of the best quality, with Llodys test can be imported for $3.40 to $3.60 per 100 lbs. The price asked for the anchor appears to be rather high, unless patented. Please advise me what action the department intends to take in this matter.

Schmidt reports tubes in bad order—Windlass perfectly efficient—Pity to change gear which other men could work with perfect safety—The chain could have been saved—Reflects on Engineers.

January 22, 1907.—Schmidt sends in his report and says : 'I very much regret the trouble with the tubes of this vessel, but nothing can change my opinion as expressed in the report. I again wish to state that I consider the windlass of the *Anticosti* capable of landing any length of chain of dimensions in use in depths where she is anchored on her station. It would be a pity to change the gear to suit the captain which other men could work with every measure of safety. The gale which drove the said lightship from her station, was undoubtedly of great violence, but I feel sure the chain could have been saved. The engineers of this vessel are well paid, and I see no reason why, during the winter season, they should not do all the opening up, regrinding of valves, and themselves obtaining any parts they may require in usual way. It appears to me that in the past an engineer considered that all he had to do was to point out work. Now I assert that men of the class employed should be able to do all the overhauling, as would be the case in any ordinary privately owned vessel.' This shows clearly enough where he thought the source of the *Anticosti's* troubles lay, namely, in the engineer's department, which evidently had had no supervision from the captain, nor from any one else. The estimated cost of repairs was $6,000, outside of electric plant.

Gregory on Anchors and Chain.—Urges starting repairs on 'Anticosti.'

January 29.—Gregory again writes the department about the urgent matter of securing suitable anchors and chains for the *Anticosti* in time for the opening of navigation; and, a few days afterwards (4th Feb.) writes strongly recommending that the repairs and alterations to the *Anticosti* be started immediately—marked 'recommended immediate authorization. W. P. A., 6-2-'07.

Chain and Anchors.—Alterations to hawse pipe.

February 12.—He again writes: 'Please inform me whether measures have been taken to provide the *Anticosti* with suitable anchors and mooring chain, the anchors to fit the new hawse pipe. I would strongly recommend that means be taken to change the hawse pipe at once or later on it will be impossible to work to advantage around the lightship. I understand from Captain Koenig that nothing was yet done in the

matter, when he was in Ottawa recently. I was recently directed not to take any action, or I would have done so, in accordance with your first communication.

Gregory to give careful description of what is required in chain and anchors.

February 19.—Deputy writes Gregory: 'Referring to moorings for *Anticosti* lightship, I have to request you to carefully describe the moorings required, giving the length and description of the chain and a description of the shackels ,swivels and anchors. The original chain supplied for the *Anticosti* was 1⅝-inch Lloyds' test, stud link cable. The experience since the lightship was moored in position should enable the officers to select the most suitable moorings.

Gregory replies, says Captain favours Martin Stockless anchors—5,000 lbs. weight.

February 21.—Gregory replied: 'The chain required is similar to the one that came with the lightship from the builders, and similar to another chain supplied by Coghlin & Co., Montreal. I was offered the same style 1⅝-inch chain delivered at Quebec for $3.25 per 100 lbs. The anchor, Captain Couillard thinks most suitable, and possessed of the best holding powers, are of the Martin style, self-canting, stockless to fit in the new hawse pipe, and should weigh about 5,000 lbs. each. The anchors lost were of the mushroom style and weighed 4,800 lbs. each, so Captain Couillard stated. I presume that Commander Spain will know the name of the makers of the style I mention. Please inform me what action the department will take in this matter. This should be done as soon as possible.

Captain Couillard thinks a 6,000 lbs. anchor and a 2-inch chain should be used. This contradicts agent's letter of February 21.

February 28.—In this connection Captain Couillard writes the Deputy: 'It was proved that the vessel drifted for three miles with an anchor of 4,800 lbs. and 175 fathoms chain. 12 hours before the chain broke 15 more fathoms were added—190 in all. This did not keep the vessel from drifting; and when the anchor got caught at the bottom the chain broke. I think a 6,000 lb. stockless anchor and a chain 2 inches in diameter should be used.

Gregory annoyed at the Department's Criticism of his so-called Indefiniteness.

March 1.—Gregory to Deputy: 'You letter 27th ulto. (copy not on file). I beg to request that you will please point out to me what items in any communication referring to anchors and chains for the *Anticosti* you find very indefinite or which in any way interfere with the department's understanding that suitable mooring chains and anchors are required by the lightship in question. As the department ordered the first chain and the second chain without reference to me at all—the latter from Messrs. Coghlin & Co., Montreal, I certainly had reason to believe that as this lightship was constructed and outfitted under special inspection, without any reference at all to this agency the officers of the department were thoroughly posted in what was necessary to replace anything belonging to that vessel; but I would thank you to show me where I am failing, as my attention is called by your communication of the 27th ulto., dictated by W. W. S., so that I may govern myself according to instructions you may choose to give me on such matters.

Gregory advises department prompted by Captain Koenig, that steps should be taken at once to outfit the lightships of the agency.—Captain Koenig and myself feel bound to warn the department against this delay.

March 1.—Another long letter on same day by Gregory to Deputy: 'I have the honour to report that it has been suggested to me by Captain Koenig that means should be taken at once to proceed with work absolutely necessary to outfit the lightships of

this agency. Mr. Schmidt is away in Halifax and Mr. Beauchemin is absent on other work. The work to these lightships should be finished at once in order that they may be ready for the opening of navigation and there is only about a month to complete this work. Please bear in mind that they have been sent to their stations on the 1st day of April, and there is nothing to prevent their being sent to their respective stations as early this season. Captain Koenig and myself feel it our bounden duty to warn the department against this delay. I do not wish to be over officious, but have never yet been behind hand; and I should like to avoid being censured later on for delays caused by others. (Initialled B. H. F.) (This letter refers not alone to the *Anticosti*. J. F. F. 7/3/07.

Repairs to 'Anticosti'—No necessity to advertise for Tenders.

March 2.—Memorandum *re* repairs to *Anticosti* (no signature).—As the time is short for doing this work instructions should be issued at once as to where tenders are to be invited. I would recommend that only a few firms having special facilities should tender on this work. The amount being less than $5,000 there is no necessity for advertising publicly.

Work on lightships—And tenders for work on 'Anticosti.'

March 7, 1907.—Memorandum: Instructions have been given regarding all the work to be done to these lightships with the exception of the *Anticosti*, as far as construction repairs are concerned. There is the electric plant to be overhauled and possibly outfitting to be done by the maintenance branch in addition. With reference to the *Anticosti* plans and specifications are ready as soon as instructions are given where tenders are to be called. This should be attended to at once. (Initialled B. H. F. L. P. B.—'Gregory to get tenders locally—B. O. M.')

Gregory authorized to incur the ordinary expenditure outfitting lightships—but anything further is to receive sanction of the Department.

March 7.—Deputy writes Gregory: 'Your letter 1st instant with reference to the outfitting of the lightships of your agency—with reference to any alterations that may be required, this is receiving the attention of the department, and you will be immediately communicated with. Regarding the outfitting of the lightships you are authorized to incur the ordinary expenditure for this purpose. Any expenditure over and above what is generally required is to receive the sanction of the department.'

Deputy explains to Gregory what he omitted to do re new chain.—Refers to Captain Couillard's suggestions, which should have been put before the Department sooner.

March 8, 1907.—Deputy to Gregory in reply to his letter of 1st instant: 'No statement of the size of the chain used on board the lightship was given by you, nor any report respecting the suitability of the chain that had been used for mooring the lightship. The department consequently invited tenders for a chain similar to that furnished in 1904 by Messrs. Polson & Co. It appears from a report by Captain Couillard that he recommends a 6,000 lb. stockless anchor for a chain 2 inches in diameter.' This is the information that the department should have had at the outset to enable it to get the size which the captain thinks should be purchased.

The time is now nearly up for receiving the tenders, and if the chain is not large enough the department will either have to invite new tenders or take 1⅝-inch chain.'

The initials on the letter referred to are none of your business.

With regard to your reference to initials that appeared on my letter, as you supposed indicating that the letter was dictated, I have to inform you that when my signature is placed on a letter I am responsible for that letter, and the letter is therefore from the Deputy Minister of Marine and Fisheries. The initials are placed on the letter for official purposes, which have nothing to do with the subject matter.

Gregory knows nothing of any recommendation by Captain Couillard—A 2-inch chain and 6,000-lb. anchor quite unnecessary—The new anchors only 200 lbs. heavier than the old ones.

February 28.—Captain Couillard thinks 6,000-lb. anchor and 2-inch chain should be used.

March 12.—Gregory to Deputy: 'Your letter of 8th instant, I beg to state that I cannot find any recommendation for a 6,000 lb. stockless anchor passed through my hands. If it did I have no copy of same; nor is it at all considered necessary for a vessel of the size of the *Anticosti*. A 5,000 lb. anchor seems quite sufficient. As to a 2-inch chain, if that is allowed it will necessitate a new clutcher barrel for the windlass, which would be very expensive. We do not consider it at all necessary. I do not remember of a 6,000 lb. anchor having been spoken of before me. 5,000 lb. is all that I understood the Captain wanted. The *Anticosti* did not leave her station the first time on account of her chain being too small, nor her anchors too light. The captain attributed his being forced to leave the station to the fact, as he said, of one of the shackles spreading out. We have nothing to prove this, as it was mere supposition. The second time he said he dragged a mushroom anchor. That seems to have been proven. Consequently we have asked for a 5,000-lb. anchor of a different description, and a heavier weight than the mushroom anchor, as the mushroom anchor does not appear to be suitable for the anchorage ground at Heath point, Anticosti island. Therefore I can see no reason for changing the tenders you are calling for. Hence my inferring that as the department has all the measurements for the chain, a 5,000 lb. anchor and 1⅝-inch chain as being what we consider suitable for that lightship. The holding power of the anchor seems to be the objective point.

Davie's tender accepted.

March 13.—G. F. Davie & Sons tender for repairs and alterations to *Anticosti*, $3,849 (recommended by W.P.A., O.G.V.S., F.G., and L.P.B., 15-3-'07).

Contract was never signed, as correspondence shows.

Deputy again writes about anchors and chains—Asks Gregory to consult some of the officers about the two anchors.

March 15.—Deputy to Gregory: 'Your letter of 12th. The department is inclined to agree with you as regards size of chain. Two kinds of anchors have been offered—one a Martin stockless anchor and the other a Taylor anchor. The Martin anchor, it appears, has a cast iron head, whilst the Taylor anchor is altogether of wrought iron. The latter anchor would cost about half the price of the imported Martin anchor. It is claimed for the Taylor anchor that it is not liable to be broken if it falls on a rock when being dropped, whilst there is some liability of an anchor made of cast iron being fractured or broken if it is dropped on a rock bottom. Please consult some of the officers on this subject and let me know at once their opinions respecting these two anchors. The master of the lightship wrote me on February 28 from Montmagny about a larger size chain being used. (Initialled W.W.S.)

Deputy's answer to Captain Couillard.

March 15.—Deputy to Captain Couillard: Your letter of 28th ultimo. A letter was written Mr. Gregory on the subject and he does not consider that a 2-inch chain is necessary, and also thinks that a Martin anchor 5,000-lb. weight is heavy enough for the vessel. He also states that it would be necessary to alter the windlass at considerable expense if a 2-inch chain was purchased instead of 1⅝-inch—the size for which the windlass was made. The department will therefore order a chain of 1⅝-inch stud link cable, and a Martin or Taylor anchor, which of course would be better than a mushroom anchor.

Captains Belanger and Koenig favour the Taylor Stockless Anchor.—Objects to Captain Couillard addressing the Deputy direct, instead of through the Quebec Agency.

March 16.—Gregory to Deputy: 'Your letter of 15th inst., I have talked over the matter of the stockless anchor with Captains Belanger and Koenig: both favour the Taylor stockless anchor. Captain Belanger says he has two Taylor stockless anchors on the *Montcalm*, and they are giving excellent satisfaction. Therefore, I may say that our people prefer the Taylor stockless anchor; and as it happens to be cheaper than the Martin anchor and possesses the quality of not breaking when falling on a rock, I would respectfully recommend that the department obtain 2 Taylor stockless anchors for the *Anticosti*, of 5,000 pounds each. I notice in your communication that you say that the master of the said lightship wrote you February 28 last from Montmagny about a larger size chain being used. I would suggest that this man be directed, when he requires any such supplies, to make his application to the agent of the department at Quebec, who should never fail, and does not fail, to consult able men about the most suitable chains and anchors required for such a service. The application from him to the department would then be on record in the agent's office.'

Is McConkey to be Inspector?

March 18.—Gregory writes department, inquiring whether McConkey, inspector of hulls, will superintend the repairs to the said lightship. If not, who is to do so?

Please telegraph McConkey to come up at once.

March 19.—Gregory telegraphs: 'Please telegraph McConkey come up at once about *Anticosti* L. S. contract—this being work to ———. This matter wants to be attended to at once.

G. F. Davie & Sons' tender.

March 13.—A tender was received from Geo. F. Davie & Sons, Quebec, $3,489, for repairs to the *Anticosti* at Quebec—date of contract, March 16—to be completed April 29. No deposit. Inspector, McConkey.

Contract was never signed, as correspondence shows.

No specifications apparently given. (Specification was afterwards found; was written by C. Thomson Schmidt.)

Who is to be Inspector of Repairs?

March 18.—Gregory writes to the department, inquiring whether McConkey, inspector of hulls, will superintend the repairs to the said lightship. If not, who is to do so?

Send McConkey.

March 19.—Gregory telegraphs: 'Please telegraph McConkey come up at on about *Anticosti* lightship contract—this being work to haul (?). This matter wan to be attended to at once.'

March 19.—Deputy ordered McConkey from Halifax.

Articles of Agreement to be signed.—They never were signed.

March 22.—Letter to Gregory, inclosing articles of agreement with G. F. Dav & Sons for the necessary repairs and alterations to the *Anticosti*, to be signed by t contractors.

March 23.—Gregory telegraphs: 'Please obtain and wire immediately intern diameter of hawse pipe necessary to take 5,000 pound stockless anchor ordered f *Anticosti*. Inspector McConkey reports size of hawse pipe given in specification repairs not large enough. Unable to proceed with work until size of pipe is dete mined. (Endorsed in red ink to Commander Spain.—F.G.)

This is luminous.

March 26.—Deputy replies: Reference hawse pipe for *Anticosti*. Specificati for new anchor states that it must fit hawse pipe. Hawse pipe should, therefore, a very little bigger than the last one.

March 27.—Samson & Filion's tender for chain and anchors accepted.

Captain takes a hand in.

March 27.—Alfred Couillard, master, *Anticosti*, writes Gregory that the lig ship needs very much to be put in dock for overhauling and general cleaning of bottom, which is very dirty. Last time she was in dock was in April, 1905.

Gregory endorses him, as does Inspector McConkey.—Gregory wants Instructio

March 27.—Gregory incloses Couillard's letter and says: I have consulted McConkey on this subject, who is decidedly of the opinion that the vessel should docked before proceeding to her station; that her rudder be properly examined i and that she be scraped and painted. All such vessels, it is well known, should docked at least once a year. It is not necessary that she be put in graving dock, she could be hauled up on the marine slip of Davie & Sons, and launched at condition of high tide. Of course, this would be after the completion of contr with Davie & Sons for alterations to the stem and hawse pipe, &c., &c. Will please inform me what action to take in this matter?

McConkey reports progress and discloses fresh needs of the lightship—A new anc has been ordered—not taken account of in Specifications for repairs and alterations.

March 26.—McConkey writes Deputy, reporting progress on the work of alt tions to the *Anticosti*—re shifting position of windlass and compressors to up deck, fitting new hawse pipes, and renewing upper portion of stem. After describ what work is being done, he says: 'Patterns are being made for the stern piece main hawse pipe. A wrought iron forging for new stern piece will be procured f the Nova Scotia Steel Works, New Glasgow, in two weeks after receipt of patt The whole of the work is progressing satisfactorily at present. Specification calls a new main hawse pipe of 12 inches internal diameter, but it having been decide supply a stockless anchor, 5,000 pounds weight, I find that the size of pipe give specification would not be large enough to admit the anchor shank. This has ca

delay in preparing the pattern for the stem piece until the proper size of the pipe is determined.'

McConkey has altered specifications—Consequently, Davie & Sons cannot sign contract as drawn.

March 30.—Letter from G. F. Davie & Sons, acknowledging receipt of copy of agreement *re* repairs to *Anticosti*, but since we accepted the contract for this work, your hull inspector, Mr. McConkey, has altered the specification concerning the stem of the vessel, which will cause extra work and necessitate longer time than at first mentioned. We have informed your agent at Quebec to this effect, and he has referred us to Ottawa.

(This letter was stamped: 'Refer to Commander Spain, 3 Apl., '07'—then 'Refer to J. F. Fraser.' It should have gone to Stumbles, and probably got to him eventually.)

Docking of 'Anticosti'—Instructions wanted.

April 5.—Telegram—Gregory to Deputy: 'Refer my letter 27th ulto. about docking *Anticosti* lightship. Must have answer by Tuesday latest. *Druid* expected to come out that day.

Instructions given, as Gregory suggested.

April 6.—Deputy telegraphs Gregory: 'Haul *Anticosti* up on marine slip to get rudder examined and have her painted and scraped.'

Then found impracticable.

April 6.—Gregory replies: 'Davie says *Anticosti* too heavy to be hauled up on marine slip. Can take her in graving dock about middle next week. Do you authorize?'

Must now go into Graving Dock.

April 8.—Deputy replies: 'Make arrangements for *Anticosti* to go into graving dock as soon as possible.'

McConkey again reports progress—Discloses new requirements.

April 23, 1907.—McConkey writes to Gregory and has the honour to report that the work on the *Anticosti* is progressing satisfactorily. It has been delayed somewhat by waiting for the stem piece from New Glasgow. It arrived Sunday and was tried in place yesterday and found to be a good fit and a first-class job. I beg to point out that no provision has been made in the specification for placing the large fog bell. This had to be removed from its position on the upper deck to make room for the windlass, and probably in preparing the specification it was expected that the bell could be placed between the windlass and companion hatch. There is no available place forward where this bell could be fixed as at present fitted, the angle iron frame or standard that supports the bell being entirely too large and out of proportion to the requirements. A new standard will require to be made if it is intended to use the bell as before.

More trouble.—More requirements.

I regret to inform you that I find the shell plating becoming badly pitted in way of the light water line, and the rivets in this part are in a bad state. It is absolutely necessary to renew about 250 rivets on the port side, 100 on starboard side; also about 40 keel rivets. Only those which are loose and leaking are included in this number. Provision should be made to haul the vessel out of water when she comes off her sta-

tion in the fall, and the riveting from stem to stern along the water line and for about 5 feet below thoroughly overhauled and renewed, as found necessary—this part being in way of the lower deck and includes the fresh water tank, should be kept in good condition. A new cast-iron fair lead warping chock is required at the bow. The captain makes application for three bunker scuttles to be fitted on the upper deck for passing the coal to 'tween decks. It has been intended to fit these scuttles, as I found there are two complete fittings on board which, the captain informs me, were supplied with the vessel. I beg to recommend that these scuttles be fitted for coaling purposes, as under present arrangements to coal the bunkers from the upper deck necessitates passing it (the coal) in bags over the vessel's sides and through the cargo ports. I would also recommend that 50 lbs. of rivet cement be supplied for the purpose of filling on the pitted plates. The work can be done by the crew.

Gregory reports that as McConkey's requirements are absolutely necessary he is providing for them.

April 23, 1907.—Gregory writes deputy inclosing above letter and says :—'As work recommended by McConkey is of a character absolutely necessary to be attended to, he is carrying it out while the vessel is in dock. If the vessel is hauled up when she comes up in the fall, the overhauling in the riveting below water line can be attended to then. The bunker scuttles to be fitted on the upper deck for passing the coal 'tween decks, are no doubt very much needed, and would greatly facilitate the taking of coal on board while the vessel is on her station, and will pay for themselves at once.'

(This letter stamped : 'Referred to Commander Spain,' and then stamped : 'Dealt with.—O. G. V. S.'

Authority for the same then given.

April 26.—Deputy writes Gregory (initialled O. G. V. S.) authorizing what McConkey suggests.

May 7.—Memorandum for chief accountant by C. Thomson Schmidt, Inspector of Government steamers.

First appearance of F. X. Drolet's part in the job—Schmidt again on deck—Machinery shamefully neglected—Engineer discharged in consequence—Boilers being impaired by oxidation.

The attached bill, amounting to $1,175.46, rendered by the firm of F. X. Drolet against the lightship *Anticosti*. When the machinery was opened up it was found that owing to the shameful neglect on the part of the engineer, who has since been discharged, all parts were in a shockingly bad condition. Two independent pumps have been installed for the purpose of keeping the water in the boilers in constant circulation, and it is hoped thereby to overcome the rapid oxidation which is taking place in same. These pumps, you will find, were strongly recommended in my report, and I understand that upon the strength of that recommendation, after due consultation between Messrs. Gregory, Parent and Beauchemin, it was decided to install the same. There is no doubt that these pumps will be of great benefit to the boilers.

No tools on board. Many other requirements.

The diaphone plant has been overhauled and compressor valves, springs, &c., adjusted. I would here remark that no tools could be found on board for the purpose of making these repairs; also, that no name could be found by which the maker of the compressor could be identified. Four complete valves for spare gear have been supplied, also one set of steam piston rings. The independent air pump, when

opened up, was found in a bad way, owing to neglect, and it was necessary to send the same to the shops to have its somewhat complexed valve gear overhauled.

The main condenser when tested, was found to be leaking badly, and it was necessary to repack same and renew ten tubes.

The parts opened up were found in such a condition that Mr. Beauchemin (Schmidt's assistant) decided it would be necessary to open up everything for the purpose of satisfying himself that when Mr. Belanger, the chief engineer, recently appointed, leaves for his station, everything will be in first-class order, and Belanger held responsible for same. I understand there is still a further charge to be made against this vessel, as the work was not completed on the 30th March. (Was this the date up to which he reported?).

This is the first appearance on the file of any word regarding work done or to be done by F. X. Drolet.

I have inspected the work done, particularly in connection with the fitting of these circulating pumps, and find all to have been carried out in a thoroughly workmanlike and satisfactory manner.

All work was duly authorized. (By whom?). Prices are fair and just. I would therefore recommend that the bill be paid.

Still further trouble disclosed by Schmidt.

May 8.—C. Thomson Schmidt writes as follows to Deputy: 'I have the honour to inform you that Messrs. Amiot, Lecours & Lariviere, with whom Mr. Beauchemin placed the order for 200 tubes, required for the port boiler of the *Anticosti*, now advise Mr. Gregory that it will be impossible to supply them before the middle of August, and in their letter dated 4th instant, ask Mr. Gregory to inform them as to what action shall be taken in the way of claiming damages from the mill with which it appears that the fault rests.

Proposes what he admits will not be a satisfactory job.

I have wired in every direction but cannot get any tubes of the size required before the middle of June, and as these have to come from Scotland, a further delay, due to mistake in shipment, may occur, and therefore places the question of waiting for these tubes impossible. I propose that 3-inch tubes shall be fitted, having the ends of each swelled to the diameter of 3¼ inches. This will necessitate considerable amount of labour being put upon the tubes, and when finished, we will neither have a satisfactory job or the same heating surface we would have with the tubes as ordered. It is, however, the best that can be done under the circumstances. When I have formed some idea of the additional cost entailed in fitting these tubes, I will then be in a position to report to Mr. Gregory as to the amount of claim that should be made, if the department so desires. The rest of the work in the engine room department of the *Anticosti* is now completed, and the department may have no anxiety as to the vessel not being ready when required, as far as detention caused by non-delivery of the tubes is concerned. (Note: The phraseology and style of this letter, and of many others from Quebec, signed by special officers of the department other than Gregory, would seem to indicate that they are all dictated by Gregory.)

Gregory has now his innings—Discovers that the electric plant of the 'Anticosti' requires overhauling.

May 11.—Gregory to Deputy: 'I have the honour to inform you that the electric plant on board the *Anticosti* requires to be overhauled, and needs, as usual, an electrician to attend to the same.

I presume Mr. Coté, inspector of these electric plants, will come down to attend to

the same, as customary. I recommend that he would be here about the 20th of the month, and advise me of the same.

Coté instructed at Sorel to go and attend to it.

May 27.—Deputy writes to Coté at Sorel: 'I am advised by the agent of this department at Quebec that the electric light plant on the *Anticosti* requires to be overhauled at once. I have to instruct you to proceed to Quebec and have the same carried out, sending to me at the same time an estimate of the cost of this work.

Deputy discovers that the agreement with G. T. Davie & Sons re 'Anticosti' repairs has never been signed by them.

August 26, 1907.—Deputy writes Gregory: 'Referring to my letter of March 23 last, enclosing articles of agreement with Geo. T. Davie & Sons of Levis, for the necessary repairs and alterations to the *Anticosti*, I have to inform you that the papers do not appear to have been returned to the department. I have to request you to look into this matter and have the papers signed and returned to the department, for the completion of the file. (Signed J. B. Halkett, for Deputy Minister.)

(Note: The writer of this letter had only to turn back a short distance on his file of letters on this subject, and he would have found the letter of G. T. Davie & Sons, of March 30, '07, explaining why they could not sign the agreement in question.)

September 12.—G. T. Davie & Sons write to Gregory in answer to his letter of 10th instant *re* agreement for repairs, &c., to *Anticosti*, giving the same reasons already given to the Deputy at Ottawa in their letter of March 30.

September 16.—Gregory then writes to the Deputy, giving the same information.

Department indignant at this gross irregularity.

September 21.—Deputy writes to Gregory (signed by Stanton, probably dictated by Stumbles). In reply, I have to inform you that I should have been notified of the alterations in an official way, in order to make the contract agree with the cost of the work. I do not see how the accounts can be certified in accordance with the contract, when no attention was paid to the contract, or any notification given for the necessity of changing the contract.

McConkey overhauled.

September 21.—A long letter was then written to McConkey (signed Stanton, dictated Stumbles), calling his attention to this matter. I have to inform you, where a contract is taken, as in this case, no alterations in the contract should be made without advising the department, so that a new specification and contract could be prepared. As the matter now stands, the accounts cannot be certified in accordance with the contract made in April last (It was dated March 16). The necessary repairs and alterations were to cost $3,849. The department does not see how matters of contract can be carried out, if officers of the department make changes without any authority, or the officer who approves of the changes notifying me, so that the contract will cover the cost of the work.

McConkey replies. Says Gregory knew of everything and that Schmidt knew nothing of new anchor.

September 27.—Long letter from McConkey (from Pictou) refers to whole history. Says Gregory was informed of everything, as well as the department. Had full approval of Mr. Gregory to proceed with the work, in order to have the vessel ready to go on her station at the time required. Inspector Schmidt assured me that when the plans and specifications were prepared, he had no knowledge of a 5,000 pound anchor to be supplied the vessel.

Fresh Instructions to Gregory, which are quite harmless.

September 30.—Deputy writes to Gregory on same subject. Refers to McConkey's explanation. Requests him in future to be good enough to return the contract or see that it is returned, when any alterations are made in it, so that when the account comes to the department, it can be seen that it corresponds with the contract.

Department at last waked up over the enormous cost of repairs to this vessel.—Calls on the Accountant for a comparative statement with the similar figures for the ss. 'Lurcher,' from the beginning.—Statement furnished, and matter forgotten.

Memorandum, without date or initials: The department has accounts unpaid at the present time from F. X. Drolet, amounting to $3,013.27, and from J. B. Morin, amounting to $807.76, both for repairs to the *Anticosti* lightship. The undersigned desires to call the deputy minister's attention to the extremely heavy repairs which have been incurred in connection with this lightship, and would deem it advisable that a statement be prepared showing the amount of repairs annually since the *Anticosti* went into commission. In this connection, a comparative statement should be prepared showing the cost of repairs to the *Lurcher* lightship. There appears to be something radically wrong in the excessive cost in maintaining the *Anticosti* lightship in the proper condition.

(Stamped: 'File and return J.F.F.' 'Referred to Commissioner of Lights 5 Oct.' 'Approved C.S. 3/10/07.' 'Mr Owen, please let me have this statement. J.F.F. 7/10/07.') Statement now given and annexed hereto.

Gregory refers Deputy to his own Instructions.

October 1.—Gregory writes to deputy, replying to his letter of September 21. Begs respectfully to state that I forwarded to you, on April 23 last, McConkey's report on the progress of the work and the alterations necessary, which were not covered by the contract, and I received your authority, dated April 26, to carry out the improvements found absolutely necessary. It is utterly impossible for any contract to be made for the repairs of a vessel or a house which will cover anything.

Gregory gets fresh Elementary Instructions in dealing with Contracts, so that the Department may keep clear of the Auditor General.

October 4.—Deputy (signed Stanton, dictated Stumbles) writes Gregory: I have to inform you that when contracts are sent out by this department to be signed by contractors, it is expected that the contractors will sign the contract and return it to the department, unless there is something in the contract to which the contractor objects. He is then supposed to give his seasons for not signing the contract, and if the department considers it a reasonable one, the contract may be changed. If there are any extras for work not foreseen, then a supplementary agreement or understanding is generally arrived at, and accounts are certified in accordance with the contract, or with the agreement to pay an additional sum. By this means the department is kept from any difficulty with the Auditor General. In the case of this particular contract, it was inclosed to you on March 22 last, with the request to have it signed, and it was not returned to the department until it was written for, on August 26, (What was the department thinking about all that time?) and then explanations were given why the contract was not signed, which should have been given in April last (and which were given on the 30th of March last).

MAINTENANCE AND REPAIRS OF 'LURCHER' AND 'ANTICOSTI' LIGHTSHIPS.

Lurcher.

	Maintenance.	Repairs.	Total.
1903-04	$ 9,785 94	$2,441 83	$12,227 77
1904-05	24,389 55	2,106 33	26,495 88
1905-06	22,598 93	1,560 31	24,159 24
1906-07	18,366 78	668 23	19,035 01

Anticosti.

	Maintenance.	Repairs.	Total.
1904-05	$12,890 41	$ 1,780 65	$14,671 06
1905-06	20,101 47	10,349 94	30,451 41
1906-07	10,630 30	1,203 11	11,833 41

In comparing the cost of maintenance and repairs of the *Lurcher* and *Antico* lightships, it will be seen that the *Anticosti* lightship was not in commission in 19 and was not placed on her station until late in the season of 1904. This will expl the difference for these years.

Accounts, amounting to $9,650, for repairs to the *Anticosti* lightship incur during the year 1906-07, are in the hands of the commissioner of lights, payment which has been withheld for the present, and to add this amount to the expenditure the *Anticosti* lightship would make the amount for repairs $10,853.11, instead $1,203.11 as shown in the statement.

To make a comparison, the expenses for maintenance and repairs of the *Lurc* for four years amounts to $81,917.90 and for the *Anticosti* for three years, includ the amounts withheld, would make the expenditure $66,605.88.

It should also be noted that the *Lurcher* is in commission and at her station whole year round, while the *Anticosti* is only in commission for seven months during the time of the season of navigation in the gulf and river St. Lawrence.

Gregory clears himself of any responsibility for the failure to get the Davie agr ment executed.

October 3, 1907.—Gregory writes deputy: 'In reply to letter 30th ultimo, u further inquiry into this matter I find that Geo. T. Davie & Sons wrote to the dep ment on March 30 last on this very subject, as I had requested them to do so, as correspondence had taken place direct between the department and Davie & So and in that communication they distinctly state the facts connected with the contr I inclose copy of G. T. Davie & Sons' letter.'

October 10.—*Anticosti* again drags her anchor (See *Anticosti*, 21040 M—page 1

Department acknowledges its oversight, but is not yet satisfied. Explains its meth to prevent misunderstandings.

October 10.—Deputy replies (dictated by Stumbles): 'In reply to your letter 3rd inst., I have to inform you that the letter of G. T. Davie & Sons of March 30 l is on file. When your letter was received I caused a search to be made for the let and found it. This explains everything satisfactorily so far as the changes alterations are concerned. It does not, however, cover the question of returning contract signed and making out a supplementary one for the extras or alterati that were made. For your information I may state that contracts are made out the contract branch and sent either through the agents or directly to the contract to be signed. If the contracts are not returned, the contract branch may not kn the reason and consequently correspondence takes place on the subject. The let of March 30 last was not seen by the officer who is in charge of the contracts, but

should not have been shown him, in order that a new contract could be made out, or a supplementary one. This explanation is given in order that there may be no misunderstanding.'

Anticosti accounts rendered up to date (not yet all in):—

F. X. Drolet	$3,013 27
J. B. Morin	807 76
G. T. Davie & Sons	3,849
" " extras	1,500 00
" " still to come in	.....
	$9,170 03

October 29, 1907.—Deputy telegraphs Gregory as follows:—'Referring to contract with Messrs. Davie & Sons for *Anticosti* lightship, specification was not sent with contract. Required for C. S. Commissioners.'

Gregory replies: 'See my letter September 16 last giving Davie's reasons for not being able to carry out contract according to specifications. Season was late, lightship urgently wanted, and cost, due to alterations in specification, very little over contract price. This appeared unavoidable under circumstances and for efficiency of service. Will get original specification from Davie and send it to you to-morrow.'

Gregory's final vindication of himself and all concerned in Anticosti matter.

October 30, 1907.—Gregory writes deputy confirming telegrams as above, and inclosing original specification for repairs *Anticosti*. I beg to add that I do not believe there is a builder of ships in Canada, nor of houses, who can undertake the repairs upon a specification which will cover everything that will be required to put such a ship or such a house in perfect condition. Every care was taken by the department and its officers to do nothing more than was absolutely necessary to cover the conditions of the contract for $3,849. Mr. McConkey's reports fully show what cropped up as the work progressed, and was not known when the specification was made out. The season was advancing rapidly and the lightship was needed as early as possible for the safety of navigation, and was under heavy expense in the graving dock. It must be taken into account also that there was much work done of the ordinary character necessary to keep any vessel in working condition, as takes place every spring. I cannot see what else could have been done by the department in this matter than was done for the efficiency as well as the economy of the service, and further I do not believe there is a ship builder in America who will think otherwise.

See file 21040 M, *Anticosti*, page 12.

November 16, 1907.—*Anticosti* again left her station.

The circumstances connected with this vessel, as shown in the foregoing extracts, would seem to indicate a great lack of efficiency on the part of her captain and crew. Yet there seems to have been practically no fault found with them at any time. No investigation of any kind apparently was held to inquire into the causes of the first disaster; and it would even seem as if the vessel did not get the overhauling then thought necessary both by the Quebec agent and the captain, before she again went to sea. (See letters Noember 11 and 18, 1904.)

If the investigation which was held in consequence of the second collapse had been thorough it would probably have been found, as already stated, that the chief trouble was in the engineer's department and that it was of old date.

The vessel arrived at Quebec, after the second disaster, on 11th November, 1906, but it was not until over four months later that any repairs were begun on her. What possible justification can there be for such a waste of time?

No sooner had the repairs begun, however, according to specifications drawn up by one of the department's experts, than the inspector began to find that many other repairs or alterations were necessary, or were said to be necessary.

The first trouble was the hawse pipe which had been specified to be 12-inch internal diameter; and that was not large enough it seems for the new anchor. Schmidt who drew the specifications, was evidently not aware that a new and larger anchor was to be ordered and it was apparently nobody's business to tell him.

Then the inspector discovers that no provision has been made in the specifications for placing the large fog bell.

The shell plating is becoming badly pitted, and many rivets loose.

The captain wants three bunker scuttles to be fitted on the upper deck for passing the coal to 'tween decks (as if she were a coal barge, instead of a lightship). These the agent says, are very much wanted, and would greatly facilitate the taking of coal on board while the vessel is on her station, and will pay for themselves at once. (He does not say how.)

Shortly afterwards a bill for $1,175.46 presented by F. X. Drolet turns up for payment, this being the first heard of it. It appears to have been challenged by the accountant, so a memorandum appears on the file in connection with it, drawn up by Mr. C. Thomson Schmidt, inspector government steamers, and the same officer who drew up the specifications for the repair work tendered for by G. T. Davie & Sons. He explanation of the matter is given in the memorandum in question, at great length (See May 7, page 23.)

The day after this memo. was written Mr. Schmidt writes to the deputy disclosing a new trouble, which is very interesting reading. An order for 200 tubes had been given by Mr. Beauchemin (who authorized him?) to Messrs. Amiot, Lecours & Larivière, who in turn placed it with some manufacturer, who failed to fill the order. Messrs. Amiot, Lecours & Larivière apparently recognized no liability on their part, and suggested that the department sue the manufacturer for damages. The damage was quite serious, as Schmidt explained, it forced him to adopt the expedient of making 3-inch tubes do for 3¼-inch tubes by having them swelled at the ends. He says, naively, 'This will necessitate a considerable amount of labour being put upon the tubes, and, when finished, we will neither have a satisfactory job, nor the same heating surface we would have had with the tubes as ordered.'

Then the electric light had to be overhauled by special officer from Sorel, which was not ordered until the 27th of May, and the vessel did not start for her station till the 27th of June, nearly three months behind time, although she had been lying in Quebec since the 11th of November.

After all this enormous amount of trouble, worry and blundering expense the *Anticosti* started for her station on the 27th of June, and left it again without orders on the 16th of November.

It seems to be a pretty conspicuous case of 'how not to do it.'

LIGHTS.

THE LIGHT BRANCH OF THE DEPARTMENT.

We have endeavoured to get some insight into the management of this branch of the department by the only means open to us, namely, by perusing several files of correspondence bearing on the business pertaining to it.

We have already commented on the difficulty of obtaining through its correspondence a full knowledge of any business transacted by the department on account of all letters being distributed among an enormous number of files, each file supposed to contain all the letters and documents or data in connection with one subject. If the letters had been filed in chronological and numerical order, as is customary in ordinary business, we should have found our task much more simple and easy.

The light branch of the department has within the last three years come to be almost entirely bound up with a private concern in Ottawa called the International Marine Signal Company, of which Mr. T. L. Willson is president and chief proprietor, he having established the business as a private concern, which was incorporated about December 7, 1906.

It is based on a patent for automatic low pressure acetylene gas buoys, taken out by Mr. Willson, which is supposed to be a great improvement on all other buoys formerly in use by the department, and still used by other countries. A sample of the new buoy was offered to the department for test in August, 1904. We have not seen any account of the test, which was made by the present Commissioner of Lights, but it was deemed entirely satisfactory; and the Deputy wrote Willson October 7 and October 11, 1904, saying that the Commissioner of Lights, who had tested the buoys, advised that they possess a number of advantages over the types previously in use; and that these automatic gas buoys would now be used exclusively by the department, concluding his letter by ordering 46 buoys at Willson's own prices, amounting to $148,000. Any imported materials required for the manufacture of them to be admitted free of duty.

This was a good beginning for Mr. Willson, and, with the splendid facilities extended him by the department, he has not been slow to better it.

It may seem that in taking up with a new idea so largely and so suddenly, the department were hardly acting with the prudence required by the circumstances. New ideas are not apt to reach a perfect development all at once, and the most ordinary considerations would seem to have called for more caution.

The buoys first purchased consisted of three types, designated No. 5, No. 7, and No. 9, respectively, costing $2,000, $3,000, and $5,000 respectively.

Buoys first purchased—$148,000.

By March 31, 195, Willson had shipped to the order of the department 16 buoys, a No. 5 and a No. 7, to Prescott, three number sevens and a No. 9 to Halifax; eight number sevens to Quebec, and one No. 5 stored to the order of the department.

As early as March 6, 1905, the Commissioner of Lights appeared to be animated by very progressive ideas, with regard to these buoys.

He is on record with the following memorandum dated July 6, 1905:

Memorandum by Commissioner of Lights.

July 6, 1905.—On May 6, 1905, the undersigned prepared a memo. giving facts and figures with reference to the Signal Buoy Service of the Dominion.

The salient points were the recommendation to provide 40 Standard automatic lighting whistling buoys at $3,750 each. The matter was not acted upon at the time,

but the supplementary estimates for 1905-06 contain an amount of $360,000 to provide for these changes. Since the introduction and testing of the Standard lighted whistling buoys, two new and much larger types have been evolved.

The Standard whistling buoy heretofore adopted is 9 feet in diameter, carries twin whistling tubes 20 inches in diameter, has a 10-inch whistle, and carries its light 10 feet above the sea level, and costs $5,000.

A much larger and more powerful type is now available: 11 feet in diameter, with twin whistling tubes 36 inches in diameter, carries an 18-inch whistle, has four times the whistling capacity of the standard type, and carries its light 30 feet above sea level, and is a practical substitute for a lightship; the cost of this is $8,500.

A still larger buoy is available for special positions, elliptical in plan, the axis of ellipse being 11 and 14 feet. It carries twin whistling tubes 4 feet in diameter, has an 18-inch whistle, with six times the whistling capacity of the Standard buoy, and carries a powerful light 30 feet above sea level.

In view of the larger and more powerful types available, the undersigned is now prepared to recommend that these be substituted for the smaller Standard lighted whistling buoy.

Owing to the inability of the undersigned to visit Nova Scotia at the time, Mr. Hutchins, superintendent of lighthouses, came to Ottawa, and the question of the improvement of the coast signal buoy service was thoroughly discussed with him, and the undersigned now recommends that the department place orders for the following apparatus:—

1st. Viz.: 2 elliptical lightship gas buoys, 11 x 14 feet, at $15,000 each, for Halifax and Blonde rock	$ 30,000
2nd—30 Cylindrical lightship gas buoys, 11 feet in diameter, $8,500 each	255,000
3rd—25 Standard No. 7 gas buoys at $3,000 each	75,000
Total	$360,000

(Note at the beginning of this memo.: He states that the Standard whistling buoy heretofore adopted is 9 feet in diameter, carries twin whistling tubes 20 inches in diameter, has a 10-inch whistle, and carries its light 10 feet above the sea level, and costs $5,000.)

These latter (the 25 Standard No. 7) to complete buoyage required for Quebec agency, and partially replace the 39 Scout-Kingston type of gas buoys withdrawn from the service.

In order to obtain the material within the fiscal year for which the appropriation is available, the undersigned recommends that it be ordered immediately. (Initialled: J.F.F., R.P.)

Commissioner of Lights recommends the purchase of $360,000 more, the type having been much improved.

It will be observed that he was alive to the great improvements already claimed to have taken place in the manufacture of the buoys; so much so that he wanted the whole year's appropriation, amounting to $360,000, invested at once in new buoys, without apparently having considered beforehand where they should all be placed or if they were really required. Of the original types only the No. 7 reappears in his new recommendation, but he is strongly in favour of the larger and more powerful types available, and recommends that these be substituted for the smaller standard lighted whistling buoy.

Change in standard gas buoy.

A few days after the filing of this memorandum, which appears to have been endorsed by the Minister, on the 19th of July, Willson writes to the Deputy to inform

him that in future the standard automatic gas buoys will be different in form, being semi-spheroidal in shape, and 8½ feet in diameter, this being the stronger form, and a very great improvement over the existing form.

Buoys sent Quebec have to be returned to Ottawa for alteration.

In August, 1905, the Quebec agent acknowledges instructions from the Deputy to remove the lantern supports from all the automatic gas buoys which have been sent to his agency, and ship the same in one car load, if possible, to P. J. Powers, Ottawa. Under these instructions he shipped 17 lantern supports.

Other Changes.

Other changes were made with the view of reducing the weight of the lantern supports at the instance of Willson's engineer, and with the consent of the commissioner of lights, who instructs Willson to furnish the new supports for the following sizes of buoys, viz.: Nos. 5, 6½, 7, 8½ and 9.

Willson instructing Halifax agent of the department direct.

To give some idea of the changes and alterations that were deemed necessary in the Willson buoys already delivered, along with the returning of all the lantern supports from Quebec, take the following letter by Willson addressed direct to the agent of the Marine and Fisheries Department at Halifax in a style pretty much as if the latter were an employee of his own.

October 10, 1905.—T. L. Willson to J. Parsons: We have shipped you a new lantern support fitted with a purifier for buoy No. 506 (type 7). This is one of the Standard gas buoys you have in service, either at Middle Ground or Neverfail. This support has attached to it a box containing the necessary connecting pipe, valve and bolts to attach it to the buoy. The lantern support and lantern now on this buoy should be removed at the earliest opportunity and replaced by the new support and a clean lantern. This work could be done without taking the buoy out of service, if properly handled, on a day when the weather is not too rough. Please return the old lantern support to us here, that we may fit a purifier to it and send it to you for the (other Standard gas buoy you have) we previously shipped you, along with the last automatic gas and whistling buoy. We sent you a new lantern support with purifier for the buoy you have on the inner automatic station. It is intended to use the whistle and rubber ball valves now on the buoy. As there is some fitting to be done in attaching this new support to its buoy, it will be necessary to take this buoy in, which can of course be done in this case, as you have in stock spare buoys of the same type, with purifiers already attached. Please return us the old lantern support from this buoy also. When the above work is done, all the automatic gas buoys in your division will be equipped with purifiers.

About the same time September 25, 1905, the assistant commissioner of lights at Prescott writes T. L. Willson that he has shipped to his address the superstructure belonging to No. 7 valveless buoy. He does not mention for what purpose. The buoy itself remains at Prescott till November 2, 1906, when the assistant commissioner of lights ships it also to Willson, as, he says, it has not been, nor is likely to be of any service until alterations are made. Willson, or the I. M. S. Co., took till September 12, 1907, to make the alterations, and then writes to the commissioner of lights as follows: 'We have finally shipped to you all the gas buoys which you had sent us for alterations, including the No. 7 valveless, to which we had to fit a new lantern support, owing to the original not being returned to us with the buoy, ignoring the fact that the whole superstructure of the buoy had been sent him in November, 1906.

Up to October 10, 1905, Willson had shipped to the order of the department 47 buoys, as follows, viz.: to Prescott 10 No. 5 and 2 No. 7; to Halifax, 3 No. 7 and 9 No. 9; to Quebec, 12 No. 7; to Lévis, 5 No. 5; to Port Arthur, 3 No. 5; to St. John, 1 No. 9; to Point du Chêne, 1 No. 9, and 1 gas and bell buoy now in shop—embracing 18 No. 5, 18 No. 7 and 11 No. 9.

Lighted Whistling Buoys for Maritime Provinces and standard buoys for other localities required.

On October 17, 1905, another memorandum appears on the file drawn up by the commissioner of lights. He says he drew the attention of the minister to the necessity of making arrangements for certain lighted whistling buoys for the maritime provinces and standard buoys for other localities, for which provision was made in the estimates for 1905-6. This matter was referred to the Lighthouse Board and provisional recommendation was given pending a 30 day test of the buoys referred to. The test has since been carried out with a No. 9 gas and whistling buoy at the position indicated, viz.: adjacent to the *Lurcher* lightship, and test was entirely satisfactory, as can be seen by the report of the captain of the lightship, attached herewith. The undersigned (J.F.F.) therefore recommends that the formal order be given to Mr. Willson as the minister has already approved of memorandum authorizing these buoys (July 6, 1905), and has advised Mr. Willson to proceed with work. (On the margin of this memo. is written: 'I concur for minister's signature' F. G.—'Minister directs that this order be given as he has visited the works and is satisfied with the work on hand, which he orders to be carefully inspected from time to time. 19/10/05. F. G.')

The order for $360,000 worth of buoys now given, without apparently knowing where they were required.—October 19, 1905. And without the authority of an order in council.—This order in council was repeatedly applied for, and refused, and was not granted until July 24, 1906.

The order for $360,000 worth of the buoys was accordingly given Willson in letter of 19th October, 1905.—namely for 30 No. 11 combined gas and whistling buoys 11 feet diameter $8,500 each, $255,000; 35 No. 8½ Standard gas buoys, $3,000 each, $105,000.

The price quoted above to be f.o.b. Ottawa. The necessary shipping directions will be given you from time to time, as the buoys referred to are ready for delivery.

It will be noticed that the whole of this large amount was invested in two types of buoys. Neither of which had hitherto been supplied to the department by Willson, although the No. 8½ buoy was supposed to be an improvement on the old No. 7, and cost the same price.

On January 17, 1906, T. L. Willson writes the commissioner of lights that the standard gas lighted and combination whistling buoys for 1906 will be:—

A. Standard buoys suited to carry 300 wx/m, occulting lanterns 9 feet above water, capable of giving 30 times the light of the usual compressed oil gas or Pintsch buoy now in service.

B. Eleven feet diameter cylindrical whistling buoys, suited to carry 375 mm. occulting lanterns 30 feet above water, giving a light equal to about 3rd order lighthouse and each carrying two whistling tubes 3 feet in diameter, draught about 27 feet.

C. Eleven by fourteen and a half feet, oval whistling buoy, suited to carry 500 mm. occulting lanterns 30 feet above water, giving a light about equal to a second order lighthouse and each carrying 2 whistling tubes 4 feet in diameter, draught about 27 feet. Both of the latter have eighteen inch diameter whistles.

(File, no action, January 17, 1906, J. F. F.).

This communication would seem to be meant to convey the impression that only

the larger and newly developed buoys should now be ordered by the department, or at any rate that that was Mr. Willson's opinion.

Meantime we may consider how the buoys already in service were standing the stress of experience.

Change in lantern supports suggested by Capt. Johnson, of C. G. S. 'Lady Laurier.'

On January 18, 1906, Willson writes the commissioner of lights as follows: 'On a recent trip to Halifax our Mr. Creelman had his attention called by Captain Johnson of the *Lady Laurier*, to the advisability of omitting the platform plates from the lantern supports of our standard gas buoys, as they are likely to gather ice, and, in his opinion, they are not needed for attending to lanterns. We would like to know if the department desires us to omit these plates, we to put the holes in the supporting angles and supply the plates, ready to rivet on, if at any time the department should desire to have them.

On January 22, 1906, the Commissioner of Lights replies: 'It may possibly be that the omission of those plates would prevent the accumulation of ice on the upper part of the lantern support; and as this is a matter that can only be determined after a trial, I have to request you to omit the plates from the Standard gas buoys to be supplied. But you are to put the holes in the supporting angles, and in the platform plates which otherwise would go on the gas buoys, and ship to the Dominion lighthouse depot at Prescott, with a covering letter explaining the object of the shipment.

Improvement adopted, but no attempt made to save anything by it.

This seems to be rather an original kind of economic progress or improvement, where the unnecessary material cut out is carefully shipped to the government's depot at Prescott and labelled as old junk, although richly paid for as part of a most expensive patented machine.

The chief engineer does not appear to have been consulted about this, nor any one else but Mr. Willson.

Mooring of buoys.

On December 30, 1905, a year and a quarter after the introduction of these buoys into the service, A. Legere, the resident engineer of the department at Halifax, wrote the Commissioner of Lights asking for plan showing how the combined gas and whistling buoys are moored; also the gas buoys and combined bell buoys, as it is outside of his jurisdiction, and that the agent at St. John, N.B., Mr Harding, having asked him for it, he thought he would write for it.

Although the answering of this letter involved only writing a line in reply and inclosing blue print plans, it was not answered till January 30, 1906, a delay of a whole month.

It does not appear that any general instructions to the department's agents with regard to the mooring of these buoys were issued by the Commissioner of Lights until September 27, 1907, when the following circular letter was written: 'I inclose herewith a blue print showing the proper way to moor the No. 8½C automatic gas buoys. Hereafter all moorings put out are to conform in all respects to the dimensions shown on the print.' This was about three years after the introduction of these buoys into the service. Even after that, Victoria agent wrote on October 3, 1907: 'Your letter 27th ulto. as to correct way of mooring No. 8½C gas buoys. Up to the present we have not used any wire rope in mooring these buoys, and request information as to whether the wire rope is to be in addition to the 2 or 2½ lengths of chain, as the case may be.'

Further change in the buoys.

February 9, 1906.—Deputy writes Willson: 'I have to instruct you to place the necessary receptacle for attaching the submarine bell to the buoys in place of the

cast steel bracket which the specifications provide, on the understanding that this change entails no additional cost to the department.'

Experimenting with whistles.

March 12, 1906.—Deputy (J.F.F.) writes the agent at Halifax: 'I am advised by the manufacturer that some No. 11 lighted whistling buoys are ready for shipment. Instructions have been given to ship these to Halifax. You will arrange to have the first two buoys held at Halifax until the department is able to determine whether the 12-inch or the 18-inch whistle is the more suitable for this type of buoy. When this information is obtained the No. 11 buoys are to be placed in the exposed positions off the coast of Nova Scotia, replacing the present Courtenay whistling buoys and the No. 9 gas and whistling buoys.

Willson announces further improvements which he offers to add to the No. 9 buoy free of charge; and suggests his taking back the No. 9 buoys at cost and substituting No. 11 for them.

March 31, 1906.—T L. Willson writes deputy: that improvements have been accomplished in the No. 11 combined automatic gas and whistling buoys, viz.:—

I. The attachment of the receptacle for the submarine bell.

II. The increased height of the air chamber above the water in the whistling tubes.

II. The combined purifier head of the generator instead of being separate as in the No. 9.

I will make changes in the No. 9 buoys which I have furnished, to correspond with the above, free of charge to your department, and further ,in the event of your department substituting the No. 11 buoys for the No. 9, I will take back and allow full value for the No. 9 buoys when delivered F.O.B. cars at Ottawa

Willson's offer of substitution of No. 11 buoys for No. 9 buoys declined for the present.

April 6, 1906.—This letter acknowledges Willson's offer, and says that it is not probable that the department will require a substitution of buoys, inasmuch as the No. 9 gas buoy meets with the requirements of the department for many localities where lighted signal buoys are necessary. If, however, a change is desired later on the department will be pleased to take advantage of the offer which you make.

Two No. 11 buoys sent to Halifax—Whistle experiments to be made with them.

Meantime two of the new No. 11 buoys had reached Halifax where they had to lie for some time at the railway wharf, as there were no preparations for them and no machinery with which to handle them. On 5th April the superintendent of lights at Dartmouth advises the agent of the department at Halifax that the two buoys have been safely landed on the wharf at Dartmouth. As they have no shed available, and the cars were required, we were obliged to employ Beazley Bros. to make a special purchase on their dredge, to remove the buoys from cars. The transportation (across the harbour) from deep water terminus to Dartmouth cost $100 for the buoys which was the best bargain we could make. In regard to testing (whistles) I beg to make the following suggestions : On 14th March last the *Lady Laurier* placed a combined light and whistling buoy, with an improved submarine bell attached, at the outer automatic station. Captain Johnson reports that the submarine bell sounded once after being submerged and then ceased sounding. We have since had no opportunity of testing this buoy with the *Lady Laurier's* receiving apparatus, and I can't say whether or not the bell is still inoperative. As this outer automatic station is the most appropriate for this large 11 feet buoy, just received, I suggest that the buoy now the

be brought in, the submarine bell removed, regulated again, and attached to the 11 feet buoy, and this new 11 feet buoy placed on that station, where satisfactory tests with the 12-inch and 18-inch whistles, &c., can most conveniently be made. If this plan is approved I can arrange to have the buoy brought in at a time most convenient for carrying out the change, and involving as little lost time as possible.

April 10, 1906.—The deputy replies to this letter, as follows: 'The intention of the department in shipping to you the first two buoys of this type is to have them anchored side by side in some convenient point in Halifax harbour in order to determine whether the 12-inch or 18-inch whistle is the most suitable for this size buoy. * * * * * It is important that this whistle test be carried out as soon as possible so that whistles may be ordered for the remainder of the No. 11 lighted buoys now under construction.

On receipt of this letter please advise me when this whistle test can be carried out, so that Mr. Creelman (Willson's engineer) can go from Ottawa to Halifax and be present at the test.

Whistle experiments completed successfully.

April 27, 1906.—Finally, after much trouble and delay, Hutchins reports to the Halifax agent that he, along with F. Creelman and Captain Johnson, have made two tests of the buoys whistles—12-inch and 18-inch and report favourably; and recommend the 12-inch whistle be adopted for use on those 11 feet gas buoys. The sound produced was loud, deep, and well sustained. It appears, however, that it was not until the 16th of July that the deputy authorized Willson to supply 12-inch whistles for the No. 11 gas buoys.

Further shipments to Halifax of No. 11 gas buoys.

In the meantime, and before this whistle test was completed further shipments of the new No. 11 buoys had been made to Halifax, eight in all, up to 21st of April, 1906, and two more in May. Not one of these had apparently been called for by the Halifax agent, or the superintendent of lights there.

Captain Johnson objects to them.

May 28, 1906.—On 28th May, Captain Johnson of the *Lady Laurier* writes thus: 'Before any more large gas buoys are sent here I think it my duty to inform you that they are not practicable, as they are too large. The smaller size, with a few alterations, would be first-class and quite safe.'

Department pretends to think that Johnson's objection is solely on account of his not having powerful enough gear to handle them.

The deputy simply acknowledged receipt of his letter without comment. The commissioner of lights wrote a memorandum about it, dated 1st June, and affected to believe that the sole reason of Captain Johnson's objection to the No. 11 buoys was that his gear on the *Lady Laurier* was not powerful enough to handle them. He says he 'is not surprised at Captain Johnson taking this ground, seeing that the hoisting gear of the *Lady Laurier* has not strength enough to lift the buoys. The department has plans provided for a new derrick and hoisting gear which will be capable of lifting a weight of 25 tons, which should obviate to a large extent Captain Johnson's objection.'.

In accordance with this memorandum the deputy wrote to the Halifax agent of the department on 13th June, as follows: 'Captain Johnson of the *Lady Laurier* informs the department that in his opinion the No. 11 gas buoys are too large, and he has to tow them into position. I have to request you to inform Captain Johnson that the department has plans provided for a new derrick and hoisting gear for the *Lady Laurier* which will be capable of lifting and controlling a weight of 25 tons and thus obviate the objection raised by Captain Johnson.'

All the buoys supplied to the department after February, 1906, seem to have been of the larger types, No. 9½ and No. 11, with the No. 8½, which is the improved No. 7.

Willson again offers to alter the old types of buoys at his own expense, excepting the cost of freight and handling.

On November 7, 1906, Willson writes to the Deputy: 'Referring to my letter of March 31, 1906, and yours of April 6, 1906, I will make the improvements in the No. 9 gas buoys, as offered, and further that I will make improvements in the 5, 6 and 7 sizes, which are now equipped with detachable purifier boxes now in service, to bring them up to the present standard by substituting the fixed purifier head upon the gas buoys, instead of the present arrangement; all of the above to be done free of charge to your department, on condition that you deliver the said buoys F.O.B. Campbell's siding, Ottawa. After these changes are made, we will deliver the buoys F.O.B. cars at Ottawa, to your order.'

This was informally accepted.

Although there appears no formal letter of acceptance of this offer on file, the buoys referred to seem to have been all sent to Ottawa at different times for alteration, as suggested—of course, at great inconvenience, and expense for freight and handling.

A further development about this time was the automatic gas beacon, principally for points in British Columbia, at a cost of $1,500 each.

Total Number and Values of Buoys and Beacons supplied by Willson up to March 31, 1907.

Up to November 2, 1906, Willson had supplied to the department 124 buoys and 1 beacon of the aggregate value of $537,825. Up to March 31, 1907, he had supplied 50 more buoys and beacons, making a total of $692,325 in two years and a half. Up to the end of 1906, all the buoys supplied by Willson had been for use in Ontario, Quebec and the Maritime Provinces, but with the opening of 1907 British Columbia began to get its full share of attention; the types of buoys sent there being No. 8½ and No. 11.

St. John Agent wants three No. 11 Gas Buoys.

January 14, 1907.—On January 14, 1907, the St. John agent of the department wrote the Deputy, saying that 'three No. 11 gas and whistling buoys are required by this agency. You will please ship them at your earliest convenience.'

Deputy wants to know what for.

On January 21, the Deputy replied: 'I have to instruct you to inform me as to name of locality for which these buoys are intended, in order that application may be submitted to Lighthouse Board for their consideration.'

Agent gives names of places.

January 29.—St. John agent, in reply, recommends that a No. 11 gas buoy be anchored off Southern Wolf Island, in place of the Courtenay automatic now anchored there, another to replace the Courtenay whistling buoy now anchored off Split rock; and the third is for a spare buoy.

Again reminds Deputy of his request.

April 2.—No attention is paid to the letter, so St. John agent writes again on April 2: 'Reverting to my letter of January 14 last, asking to be provided with

3 No. 11 gas buoys for Split rock, off South Wolf island; and the other for a spare buoy; and your reply of February 1, informing me that the matter would be laid before the Lighthouse Board, I have not received any further information on the subject up to this date.'

Is asked for a Return of what he has.

May 8.—This letter is not answered till May 8, when the Deputy writes: Your letter, April 2, referring to your former letter, January 14, asking for 3 No. 11 gas buoys. I have to request you to be good enough to forward to me a list of the gas buoys which have been sent to you for the Bay of Fundy, and the positions in which these buoys have been placed, together with any recommendations which you may have for additional automatic buoys for your agency.

Which he gives, and the matter ends there.

May 23.—On May 23, St. John agent sends a complete list of gas buoys received at his agency, and stating where they are placed. They consist of five No. 11, one No. 11½, one No. 9½, one No. 8½, eleven No. 8, and two No. 7.

Apparently, nothing further was done about this, as the matter disappears from the file.

Buoys for British Columbia.

About the beginning of 1907, special attention appears to have been given to British Columbia in the matter of buoys.

December 11, 1906.—An order in council was asked for by the minister to authorize the following recommendations of the Lighthouse Board, viz.:—

For Ontario:	Northport shoal, Bay of Quinté: gas buoy 8½C at..	$3,000
Prince Edward Island:	Miscouche shoal: gas buoy 8½C at..	3,000
British Columbia:	Middle bank, strait of Fuca: gas buoy, 1 No. 11, with bell..	9,550
"	Sand Head, Fr. river, gas buoy, 1 No. 11, with bell.	9,550
"	Comox bar, gas buoy, 1 No. 8½, with bell..	3,750
"	Ledger's reef, off McNeill's point, gas buoy, 1 No. 8½	3,000
"	One spare gas buoy, 11, with bell..	9,550
"	" 8½, with bell...	3,750
And six gas beacons, as follows:—Boat point, Sarah island; West rock, Gulf of Georgia; Gibson's reef ,off Gibson; Zero rock, Rivers inlet; Fog rock, Fitzhugh sound; Morning reef, Klewnugget, at $1,500 each..		9,000

Victoria agent advises what the I. M. S. Co. are going to send him.

February 13.—Victoria agent writes to Deputy, as follows: 'I have to inform you that the engineer of the International Marine Signal Company of Ottawa advises that, according to instructions received from the department, six automatic gas beacons had been shipped to the Pacific coast via G.T.R. and C.P.R. I notice that these beacons are intended for certain points enumerated in Mr. Creelman's letter, and, amongst them Gibson's reef, for which I presume Watson's rock is meant. Instructions were received some time ago to establish a Wigham's 31-day lamp at this point. I beg to be advised whether it is the intention of the department to adhere to the instructions which I have already received or to establish a gas beacon on Watson's rock.

It conflicts somewhat with what the department has already instructed him—What are they going to do about it.

Here we have instructions given by the department to the International Marine Signal Company affecting the administration of their British Columbia agent, with

whom, however, the department does not take the trouble to communicate, even although the matter involves the cancelling of instructions previously given him. It would almost look as if the International Marine Signal Company were regarded by the chief officers of the department as a branch of the Department of Marine and Fisheries, and a favoured one at that.

Shipments of buoys and beacons to British Columbia.

January 19.—The International Marine Signal Company advises Deputy: That, as instructed by his letter of January 10, they have shipped to British Columbia 2 gas buoy . No. 11, serial Nos. 626-7; January 30, shipped to British Columbia, 2 gas buoys, No. 8½, serial Nos. 628-630; February 5, the I.M.S. Co., shipped six gas beacons to Victoria, B.C.; February 27, I.M.S. Co., shipped 1 gas and whistling buoy, No. 11 and No. 629, with bell, intended for spare.

February 16.—Victoria, B.C., agent writes to Commissioner of Lights: 'I beg to requisition for the following:—6 gaskets for carbide door cover for No. 8½ auto. gas buoys; 6 rubber gaskets for carbide door, No. 7½ beacons. (Recommended, J.F.F., 25-2-'07.)

Fresh instructions from the Deputy.

March 5.—Deputy to Victoria agent: Your letter 13th ult. I beg to state that the Lighthouse Board has passed an unwatched light for Gibson's reef off Gibson island. With reference to Watson's rock and the 31-day light, I have to inform you that the department has no Wigham lights available, and as I indicated in a previous letter, you are authorized to use your own judgment as to the disposition of the gas beacons forwarded to you. You have been requested to forward a complete report as to the number of unwatched lights requested granted, and the means available at your agency for carrying out instructions given.

Six gas beacons and four gas buoys lying on wharf at Vancouver.

March 6.—Victoria agent to Deputy: Reports that he has lying on the C.P.R. wharf at Vancouver, 6 gas beacons and 4 gas buoys, waiting transportation to destination, and the *Quadra* is the only available steamer; and it will keep her engaged for upwards of two months.

No more buoys should be shipped for the present.

Would recommend that no more buoys be shipped to the coast until we are in a position to place them as soon as they arrive

The department has already been advised on several occasions that present accommodation will not permit the storage of a large shipment of aids to navigation and supplies.

Another Number 11 advised for Spare.

I am advised by engineer of the I.M.S. Co. of the shipment of one No. 11 automatic gas and whistling buoy with 500 lb. bell apparatus, No. 629, marked 'intended for spare.'

Nine more automatic gas beacons advised.—Ship four Wigham lamps to Prescott.

March 13.—To agent, Victoria: 'Instructions have been given to the I.M.S. Co. to ship to you nine automatic gas beacons complete. The necessary lanterns will be forwarded from the Dominion Lighthouse Depot, Prescott. As you were advised in another letter, you are to ship the 4 Wigham lamps at your agency to the lighthouse depot at Prescott, and automatic gas beacons are to be used where required in British Columbian waters. (Initialled J.F.F.)

Only on 5th instant, after having instructed Victoria agent to use a Wigham lamp for a certain place, the deputy said that the department had no Wigham lamps available, and now instructed him to ship four in use to lighthouse depot at Prescott.

Gibson's reef confounded with Watson's rock or reef.

March 14.—Victoria agent to Deputy: 'You letter 5th advising that Lighthouse Board had passed an unwatched light for Gibson's reef off Gibson island; in reply I beg to explain that the reef off Gibson's island is named Watson's reef on the chart, and that a gas beacon is being shipped on board the *Quadra* to be installed on this rock.

This is the second time within a month that the agent has set the Deputy right about Watson's rock or reef, and his confusing it with Gibson's reef, off Gibson island.

Another No. 8½ gas and bell buoy for spare.

March 18.—I.M.S. Company have shipped to British Columbia one No. 8½ automatic gas and bell buoy for spare. We have notified Captain Gaudin of this shipment. (The department is evidently determined to make the B.C. agency a dumping ground for all the buoys Willson can wheedle them into buying, whether they are wanted or not.)

Power Derrick Scow for British Columbia.

March 20, 1907.—Deputy to Victoria agent: Your letter 6th, with reference to lack of facilities for handling aids to navigation at your agency, I have to advise you that plans are being prepared, and tenders will be called for the construction of a power derrick scow for British Columbia waters. While it may take some time for the construction of this scow you are directed to forward to me a report indicating what boats are available and may be chartered for the purpose of placing gas buoys and other aids to navigation that may be forwarded to you. The department recognizes that the *Quadra* is unable to overtake the work as it stands now in British Columbia and pending the furnishing of permanent appliances, it is necessary that other steps be taken. Your early attention to this is equested (J.F.F.).

No. 14 Lightship Gas Buoy for Blonde Rock.

March 5, 1907.—Deputy to Halifax agent: 'Instructions have been given to the I. M. S. Co., to forward to you one No. 14 lightship gas buoy similar to that recently placed in the position of the outer automatic buoy. The buoy referred to above is to be placed at Blonde Rock. It may be some time before delivery can be made of the buoy referred to.

(The No. 9 buoy at Blonde Rock went adrift about October 10, 1906—No. 546—and has not been recovered.)

Scout Buoys sent to Halifax—Obviously Junk.

March 21, 1907.—Deputy to Halifax: Instructions have been given to the Lighthouse Depot at Prescott to ship to you 15 Scout type gas buoys. These have been condemned by the department, and have been replaced in service by No. 8½ automatic gas buoys. They may be used at your agency in place of conical or can buoys with a suitable top, and the department is making arrangements to provide a sealed ball-bell attachment so that the buoys can be utilized as bell-buoys. Please advise me the disposition that you suggest making of these. (J. F. F.)

Though Nominally to be used.

March 25, 1907.—Deputy to Halifax agent: 'I have to advise you that additional instructions have been given to the Lighthouse Depot at Prescott to ship you 13 more Scout type gas buoys. These are condemned as gas buoys, and are to be used as either conical can or bell buoys; and for the latter a special attachment will be provided. (J. F. F.).'

Halifax will endeavour to use them.

March 27, 1907.—Halifax agent to Deputy: In partial reply to yours 21st, I beg to say when the buoys are received and cared for we will endeavour to utilize them for some of the many opportunities that our rivers, bays and coast shoals present. Awaiting these buoys and the sealed ball-bell attachments.

Halifax sent 2 No. 6 buoys to Ottawa 8th March.—Have no others.—Halifax agent replies to instructions from Deputy to return all No. 5 and No. 6 buoys to Ottawa for alteration.

April 1, 1907.—C. A. Hutchins (approved Parsons agent, Halifax): Your letter 25th ulto., I beg to report that on 8th ulto. we sent to Ottawa 2 No. 6 gas buoys in accordance with previous instructions; we have no more on hand. We have on hand at this agency 2 No. 8 gas buoys in the dockyard Nos. 506 and 8 and 1 No. 8 at present in St. John, No. 519 to be replaced off the Avon river as soon as the ice disappears. Those three buoys have the purifiers in the lantern supports. The 2 No. 6 already returned were brought in from the Middle Ground and Neverfail, Halifax harbour, having been replaced by No. 8½ buoys. We should have at least 1 No. 8½ buoy on hand, as spare, to relieve Middle Ground and Neverfail. I beg to ask if we shall send these No. 8 buoys 506, 508, 519 to have purifiers fitted in heads of buoys. A combined gas and bell buoy should be sent to St. John to replace No. 519 for Avon river. This buoy is attended to by the *Lansdowne* from St. John.

The above letter was in answer to Deputy's of 25th March, which was also written to St. John, and on 30th March to Prescott, and was as follows: All No. 5 and No. 6 gas buoys at the agency are to be returned to Ottawa, in order that new heads containing purifier may be placed by the manufacturer, as he has offered to do this free of cost to the department, if the buoys are delivered to him f.o.b. Ottawa. On receipt of this you will reply by wire the number of No. 8½ gas buoys which will be required to replace the No. 5 and No. 6 buoys at your agency.

Bell attachment wanted for Scout Buoys, and price asked for from I. M. S. Co. Price $474.

These buoys were evidently called in to Ottawa in accordance with Willson's offer of 7th November last to alter them free of expense to the department except freight and handling. He made no mention, however, of No. 8 buoys, a few of which were evidently in the same category as the 5s, 6s and 7s.

May, 1907.—On May 6 a price was asked from the I. M. S. Co., at which they would supply a bell attachment for the 'Scout' buoys which were to be converted into bell buoys for the maritime provinces. The price quoted was $474.

Bell attachment to be tested at Prescott appears to have been neglected.

On May 10 the commissioner of lights advised assistant commissioner of lights, Prescott, that a bell attachment for Scout buoys had been ordered from the I. M. S. Co., to be shipped to Prescott. I have to request you to have this tested and send a report to the department.

This was duly acknowledged May 13, and was promised attention. It did not appear to get it, however, as on June 18 the commissioner of lights telegraphed to his assistant at Prescott: 'Advise me when you will complete test of Scout type bell buoy.' No answer appears on the file.

Remaining Pintsch buoys abandoned.

On the 26th of June the three remaining Pintsch buoys in the service were abandoned and three No. 8½ buoys put in their place at Barrett Ledge, Channel Patch and Beaujeu Bank respectively.

Latest improvement up to date.

June 10, 1907.—On 10th June the Assistant C. of L., at Prescott, acknowledges to deputy receipt of his letter of 7th inst., in which you inform me that you are sending under separate cover blue print sheet No. 1001 giving the governing dimensions of the latest type No. 9½ automatic gas and whistling buoys, which is provided by this department, and which carries an adjustment for submarine bell (J. F. F.)

A similar letter from Victoria agent is dated 14th June. This seems to refer to the latest improvement or alteration carried out on these buoys.

Book of instructions for the handling of Buoys issued by the I. M. S. Co.

June 18, 1907.—On the 18th June, after the buoys have been nearly three years in service the commissioner of lights sends to all the agencies of the department, a book of instructions issued by the International Marine Signal Co. for assembling and charging automatic low pressure gas buoys. Presumably up to this date they had had no instructions, and were left to their own devices, as they had been up to a comparatively late date, with regard to the mooring of the buoys.

Great accommodation by the department to the I. M. S. Co.

June 28, 1907.—At this date a singular transaction with the department was proposed by the I. M. S. Co., and after some delay carried out. The company were in need of a No. 11 lighted whistling and bell buoy to sell to the government of Brazil, and of course had no such expensive luxuries in stock. But being fully as well posted as the department itself as to its buoy service, they knew that they had supplied it with just such a buoy in August, 1906, at a cost of $9,550, which was provided, or at any rate considered as a spare, and was still lying at Prescott. They asked the department to give them back this buoy and take in exchange for it two of their improved No. 9's, now called No. 9½, at a cost of $5,000 each, the department to pay them the difference of $450, but to get no advantage whatever from the deal—neither discount nor bonus.

History of the transaction.

The eagerness of some of the officials of the department to serve the company in this matter, without consideration for the government, was quite remarkable. There were no difficulties at all. It was explained that the No. 9½ tpye, lighted whistling, was not available at the time that the No. 11 buoy was purchased by the department, and that the 9½ type will meet all the requirements of the department. So, after submission to the Privy Council it was carried through.

The No. 11 buoy was shipped from Prescott on the 19th July. On the 13th August the deputy wrote the I. M. S. Co., as follows :—

'I have to acknowledge receipt of your letter of 28th June *re* exchanging one No. 11 gas buoy for your giving two No. 9½ buoys, difference of $450 to be paid by the government. In reply I beg to inform you that authority is given to return to you the No. 11 lighted whistling and bell buoy; and I have to instruct you to ship to the

L. H. depot, at Prescott, for transmission to the Parry Sound depot two No. 9½ ligh whistling buoys, and credit against the account the price paid by the department you for the No. 11 lighted whistling and bell buoy.'

The No. 11 buoy, as above stated, was shipped from Prescott 19th July.

The two No. 9½ buoys were shipped from Ottawa on 17th August.

On the 19th August the deputy writes to the C. of L. who was then at Presc as follows: 'With reference to the order in council of 1st inst. approving of purchase of two buoys for Parry Sound depot, I am to request you to inform me wl you expect that these buoys will reach destination'?

On 21st inst. the C. of L. replies: 'Your letter 19th inst., I beg to state tha was the intention to send these buoys to Parry Sound on the gas and derrick scow r under construction at Prescott. I returned from Montreal yesterday, after hav seen the contractor for the machinery and derrick, and I find that so little progr has been made that it will be late in the fall before the scow can reach the Georg Bay. If the delivery of the buoys is required before this I would recommend that cars be not unloaded at Prescott, but rerouted to Depot Harbour.'

On 28th August deputy replies: 'Your letter 21st. I have to inform that it is considered desirable that these buoys be sent by freight. I understand t Mr. Noble has telephoned you to this effect.

So the two buoys were shipped by rail to Parry Sound, the government of cou paying the freight, which is not small.

The first buoy was said to have been purchased to go to Parry Sound by the s which was building. The buoy was bought 4th August, 1906, and paid for, $9, and lay at Prescott waiting for the scow until 19th July, 1907, when Willson kir took possession of it again and substituted two others for it. These could not v any longer for the scow, and of course had to pay their way. It is presumed that spare buoy was all that was wanted at Parry Sound, if even one was wanted. T why send two? Probably for the luxury of paying the freight.

We are informed that the scow left Prescott 21st October and arrived in Pa Sound on 1st November.

When did the two buoys arrive there, and what was done with them?

Commissioner of Lights calls for more buoys for British Columbia.

June 28.—On June 28, the Commissioner of Lights again puts himself on rec in a memorandum showing that in his opinion British Columbia was not even sufficiently supplied with buoys. He says: 'In view of the increase of shipping the necessity of additional aids to navigation in British Columbian waters, the un signed has the honour to recommend that 10 No. 9½ lighted and whistling buoys procured from the I. M. S. Company at a cost of $5,000 each, and shipped by department to the agent at Victoria, B.C. (Signed J.F.F.; initialled W.T.).

This recommendation passed Council July 10, and the whole ten buoys v despatched on July 24 and 26.

Ten more buoys No. 9½, for Victoria, B.C.—Agent advised of them.

In advising the agent the Deputy said: 'Instructions have been given the I.I Company to ship to you 10 No. 9½ lighted whistling buoys for British Columl waters. I have to instruct you to forward to me, after consultation with Cap Troup, a list of the points where these buoys are most urgently required. The I.I Company has been instructed to forward a blue print, giving the governing dimens of the buoys referred to. Lanterns for these buoys will be forwarded to you in course. (Initialled J. F. F.)

Agent acknowledges instructions and is waiting for Captain Troup.

July 26.—Victoria agent to Deputy: 'Your letter 19th advising 10 No. 9½ bu also to forward me a blue print giving plans and dimensions of these buoys. I a communication with Captain Troup with reference to the placing of these b where they are most urgently required.

Department shows urgency to get buoys disposed of.

And again, on July 30, he writes the Deputy: 'I have to inform you that Captain Troup has been away on a trip to Alaska on board the C.P.R. steamer *Princess Royal*, returning yesterday. He leaves for Montreal to-morrow, and requests that the question of placing these buoys be left in abeyance until his return in about ten days, in order that he may obtain a report from the captains engaged in the coasting trade. I beg to acknowledge your telegram of this date: "No additional buoys beyond the 10 lighted whistling buoys shipped you will be forwarded to British Columbia until further arrangements made for additional facilities. Wire best arrangements you can make to charter suitable tug to place number lighted whistling buoys, and to tow scow. If more assistance than tug required, can you charter any suitable steam barge for the outside work." The I.M.S. Company has forwarded me three drawings governing the dimensions of the No. 9½ lighted and whistling buoys.'

(Note the long telegram. What necessity was there for it? Note also the anxiety to have the buoys placed or disposed of in some way.)

August 8.—Deputy to Victoria agent: 'Your letter 30th ulto., in which you advise me that you wish to await Captain Troup's return before sending to me a list of the points where the 10 lighted whistling buoys should be placed.

I beg to call your attention to the necessity of your keeping a sufficient number of these for spare buoys. Please be good enough to let me have the list referred to at the earliest possible moment.

Expense no consideration—Almost an invitation to extravagance.

'Please note also that I will require a report from you as to the general facilities which you may need for placing and maintaining the new aids to navigation supplied to your agency. The report should be clear, and any recommendations made should be specific.'

Spare buoys in British Columbia.

1 No. 11; 4 No. 9½; 1 gas buoy; 1 gas and bell buoy.

August 17.—Victoria agent to Deputy: 'Your letter 8th inst., calling my attention to the necessity of keeping a sufficient number of buoys for spare ones, and in reply beg to inform you that after the Swiftsure bank and the Sand heads buoys have been installed, we shall have one spare No. 11 buoy in readiness for relief. We are only placing 6 of the No. 9½ and will have 4 to spare. We have also one each to spare of the gas, and the combined gas and bell buoys (7 spares in all).

I. M. S. Co. advise that all the No. 5, No. 6 and No. 7 buoys now changed except five No. 5 and one No. 6.

September 12.—The I.M.S. Company write Commissioner of Lights: 'As instructed by yours of August 1, we have finally shipped to you all the gas buoys which you had sent us for alterations, including the No. 7 valveless, to which we had to fit a new lantern support, owing to the original not being returned to us with the buoy. We note that you have not yet returned to us for alterations five of the No. 5 buoys, serial numbers 505, 530-1-2-4, and also 1 No. 6 buoy, serial number 550. As these latter buoys were origiually shipped to Prescott, we presume that these are the buoys which are still at Parry Sound.'

Buoys left out during the winter in Parry Sound channel.

September 25.—Commissioner of lights replies: Your letter 12th. In reply, I have to advise you that these buoys were left out during the winter at the Parry Sound ship channel, and I think that they have been recovered, with the exception of one. Owing to the department's lack of facilities at this point, it has not been possible to

lift out these buoys and ship them to you, but this will be attended to at the earlie possible moment.

Great difficulty in collecting complete information about the buoys supplied by T. W. and the I. M. S. Co.

The Auditor General having called on the department for a complete list of the buoys purchased from T. L. Willson and the I. M. S. Co., together with a cer ficate from each agent of the department to whom they had been sent, that they h been received, and were either in service, or in store, or had been shipped to so other agency, the department seemed to have the greatest difficulty in giving a cl account of what had been done with each buoy. No books or proper records ha been kept in the office of the commissioner of lights. Each agency had to be appli to for all the evidence it could give, which in some cases had to be revised, resulti as usual in an abundant correspondence, tedious and confused. The I. M. S. Co. a had to give their assistance, as the following shows:—

I. M. S. Co. asked to supply a complete list.

September 25.—Deputy to I. M. S. Co., September 25. 'I desire to call your att tion to the request made some time ago to furnish this department with a compl list of all buoys and beacons supplied to it, together with the points to which t were sent to. Kindly give this matter your immediate attention.' (Initialled J.F.

And on the same day a letter was written to W. Kearns, of the Auditor Gener office, as follows:—'I have your note, 24th inst. The list promised you is nea completed. We are almost without any facilities at Victoria for handling new aids navigation, but they are being attended to with the least possible delay, and bo have been chartered for this purpose. Plans have been prepared for the new b steamers, and I expect the coming session will see sufficient provision made for t and other services. I have so far received excellent reports relative to both the buoys and beacons.

Nothing but appreciation of the new buoys discoverable in the correspondence of department.

There is nothing to be found in any of the foregoing extracts taken from department files which gives the faintest indication of anything unsatisfactory the work of T. L. Willson or the International Marine Signal Co. It never app to have been criticized by any officer of the department; and, as there appears at same time to have been no question of price, the impression is conveyed that exception whatever could be taken to it. This is confirmed by the direct evidence the deputy in his letter of January 31, 1906, to the Naval Secretary of the Uni States at Washington, where he says: 'This department has had in the past consi able difficulty in carrying out its policy of providing an efficient buoy lighting sys ond has taken great pains to test and investigate the Willson buoy, with the re that it has been fully adopted; and the department purchases no other types. I regarded as a distinct improvement on all others which the department has used can therefore recommend it to your board.'

In a subsequent letter, dated June 13, 1907, to the Secretary of the Trinity Ho London, he is much more guarded, as he had good reason to be; but even in this le no one could gather from it anything but unqualified approval of the buoys, based the department's experience of them. He gives a complete statement of all the b and beacons acquired by the department from Willson and the I. M. S. Co., and cost of the aggregate number of each type. He says: 'The experience of this dep ment shows that the lighted whistling buoys which have been supplied by I. M. S. Co. are superior to the Courtenay whistling buoys heretofore in service, i much as the area of the whistling tubes is greater. This department has had i

service compression gas buoys using both Pintsch and acetylene gas. The Pintsch gas buoys have been discarded by the department, and the acetylene high pressure buoys are being replaced as rapidly as possible by automatic gas buoys of the type manufactured by the International Marine Signal Co. I have pleasure in sending you, under separate cover, copies of the annual reports of this department for the years 1904-5, which contain certain information with reference to the gas buoy service of Canada.'

It seems to us that a much more extended experience of the Willson gas buoy than the department had had was necessary to justify the writing of such letters as the above to the representatives of the United States and Great Britain.

It seems hardly possible that every report coming to the department from its agents and inspectors could have expressed nothing but unmixed satisfaction with everything turned out by Willson and the I. M. S. Co. If there were no other evidence except the fact that all the earlier buoys made had rapidly become obsolete, and had required to be changed and improved so as to satisfy the makers themselves, if not the department, that should have been sufficient to deter the deputy from openly giving such unqualified endorsements.

We know, however, that when he wrote the letter to the secretary of the Trinity House, he was in possession of the annexed report from the Superintendent of Lights at Halifax, dated May 14, 1907.

This report (which appears to be the only one on the files of the department, although the buoys have been in use for three years), affecting as it does the latest type of buoy, and taken in connection with the loss of the buoys from Blonde rock and Brazil rock, which were of the No. 9 type, is calculated to throw the utmost suspicion on the workmanship and design of these buoys; and to deepen the impression already gained from a perusal of the correspondence, that the department has been most imprudent in committing itself so unreservedly to Willson and the International Marine Signal Co., at enormus expense to the country.

This report placed on file 26688—'Improvement of coast buoy service, Maritime Provinces.' J.F.F.

The Agent,
M. and F., Halifax, N.S.

HALIFAX, N.S., May 14, 1907.

SIR,—I have to report some unsatisfactory results from our fall and winter tests of the No. 11 gas buoys, which I beg to make in detail, as follows:—

Cape Canso: Buoy No. 562. Placed buoy July 20, 1906. On January 21, 1907, Captain Johnson found buoy hove down on its side, the lantern support being covered with ice. On February 8, 1907, the *Lady Laurier* brought in buoy and moorings. Buoy in good order. Lantern full of ice and water.

Comment: The fact that the buoy was hove down by the weight of accumulated ice on the lantern support suggests that the height of superstructure is too great for service on this coast.

Sambro: Buoy No. 574. Buoy placed December 31, 1906. Reported out, January 7, 1907. Relighted, January 7, 1907. Reported out, April 8, 1907. On April 17, 1907, Captain Johnson found the lantern support and fixtures had entirely disappeared. Brought in buoy and moorings. Lantern support not yet recovered from the bottom.

Egg island: Buoy No. 583. Placed buoy, January 18, 1907. On April 11, 1907, Captain Johnson reported lantern support entirely gone. On May 8, 1907, *Lady Laurier* picked up buoy and moorings, and Captain Johnson grappled for and recovered the lantern support from the bottom. One corner angle-iron and four braces bent, and one brace broken, whistle-pipe pulled out of flange. Part of ventilator gone. Remainder of ventilator bent. Whistle diaphone plate loose. Rubber valve balls collapsed, possibly by being softened by the crude petroleum, 22 gallons of

which we put in each tube, or else by the natural pressure in 36 fathoms water, when lying on the bottom.

Inner automatic: On April 23, 1907, this buoy was examined. All the nuts on bolts holding the lantern support to buoy, that is, the four corner angle-irons, had entirely worked off and disappeared. Four of the bolts and nuts holding the whistle-pipe flanges to buoy had entirely disappeared, and the other four were loose. The latter could not be tightened, but new bolts, fitted with split keys under the nuts were fitted to the four angle-iron lantern supports. It will thus be seen that the lantern support was only held in position by two whistle-pipes, and one of these was four bolts short. Had this not been looked after promptly after discovering the loss at Egg island and Sambro, we would have lost the lantern support of this buoy the first gale which occurred. Loose bolts were placed in holes of whistle support to prevent escape of air.

Remarks and Suggestions: The primary trouble is caused by the nuts on bolts securing the four angle-iron corners of support to the buoy, working loose, no provision of any kind for locking, or preventing nuts from working loose having been provided.

Secondly, the castings on foot of said angle-iron supports, and also the cast bracket on buoy, on which those four legs are bolted, are uneven on the surface, and in consequence do not make a solid or rigid joint. This, I think, could be remedied by having the connecting parts of castings planed true, or by making a shaft coupling joint, or male and female joint, commonly so called.

Thirdly, the four iron corners of lantern support should be secured to the cast brackets on top of buoy by jam nuts and split keys, or some device to prevent the nuts from working loose.

The lantern should also be secured by some similar means.

Height of lantern supports: It is my opinion, and also that of our captains, with whom I have discussed the question, that the height of the lantern supports on our No. 11 buoys is entirely too great for service on this rough coast. We had expressed this opinion before the severe test alluded to in this report was made. We think it quite unnecessary to show a gas buoy light at an elevation of 30 feet above the water. In weather when lights should be visible, we have our coast lights as a general guide. In no case is it necessary to see a gas buoy light at a greater distance than four or five miles, and in thick weather the sound signal is the only guide to their discovery. Therefore, we advocate, for this reason, and also as a matter of convenience and economy, that the height of the superstructure be reduced to that of the No. 9 buoys showing the light from the lantern at an elevation of about 15 feet above the water.

Length of tubes: We also think that the length of the tubes might be decreased by about five or six feet, without affecting the force or volume of air forced through the air pipes. The reduction of the length of lantern support and tube under buoy would give the buoy greater buoyancy, and increase the freeboard, thus increasing also the air space and reserve of air between the water in the tubes and the diaphragm in buoy, which should increase the power, and prolong the sound of the whistle.

On the first favourable opportunity the *Lady Laurier* will grapple and bring in the lantern support lost from the Sambro buoy, which lies on the bottom in about 26 fathoms water. The condition when recovered will be reported.

Your obedient servant,

C. A. HUTCHINS,
Superintendent of Lights

This is an exact copy of report taken from file 26688. J.F.F. 20/2/08.

May 30, 1907.

The Agent,
Marine and Fisheries,
Halifax, N.S.

SIR,—I have to acknowledge receipt of the letter of the superintendent of lights, dated the 14th instant, transmitted by you, covering a report on fall and winter tests of No. 11 gas buoys.

I have carefully considered the report referred to and it is the intention of the department that the high towers provided shall be retained for the present and be tested again during the coming winter. In this connection, I note the loss of the lantern supports and lanterns, and I have to instruct you to see that longer bolts are provided for holding the lantern supports to the buoys and that a lock nut or a cotter pin is used.

Referring in detail to your report, I may state that the Cape Canso buoy No. 562, should not have a counterweight attached to the submarine signal receptacle, although these counterweights are now in Halifax and weigh about 2,800 lbs. each.

With reference to the Sambro buoy No. 574, I do not observe any inspector's report relative to the buoy being relighted. Please be good enough to forward this report to me.

There is no doubt that provision should have been made for bolting more securely the lantern supports to the buoys, but as no difficulty had ever been experienced in the past, it was not expected that this would prove serious. The instructions above relative to lock nuts or cotter pins will obviate this difficulty in the future.

It is not considered, even now, necessary, that the cast steel pieces to which the lantern supports are bolted, should be planed. There is considerable 'give' in the lantern support, and the casting at the base of the same should be drawn down to the casting riveted to the buoy.

With reference to lantern bolts for No. 11 buoys, I have to advise you that instructions will be given to see that these are provided with a cotter pin. Relative to the height of lantern supports the department is not prepared to make any change in the height at the present moment as I have indicated above, and it will not be practicable to shorten the whistling tubes without considerable expense in view of the fact that the submarine bell receptacle is attached.

I have to request you to forward from time to time any observations which you may wish to make relative to these or other gas buoys in the service.

Your obedient servant,

F. GOURDEAU,
Deputy Minister of Marine and Fisheries.

CONTRACTS.

January 18, 1907.—With Chas. Koenig, captain of C. G. S. *Druid*, to pay t board of the master, officers and crew of his steamer at the rate of 60 cents each p day, according to bills of fare attached, one for each day of the week. Should th be any officer of the government service on board or other passenger, the amount be paid to Koenig for each would be $1 per day. If any labourers are on board th would have to be paid for at rate of 75c. per day.

February 21, 1907.—With Midland Towing and Wrecking Co., Limited, to remo the wrecked tug *Castle*, now lying sunk in the Detroit river, by May 1, 1907. Co sideration, $1,750.

January 2, 1907.—Drummond, McCell & Co., steel plates and shapes required the construction of the hull 'A' frame, spuds, beam, dipper arm, bucket, &c., of dip dredge No. 19, to be built at the government shipyard at Sorel.

Steel plates, 725,000 lbs., at $1.80 per 100 lbs., delivered free on board cars at So

Steel checkered plates, 65,000 lbs., $2.80 per 100 lbs., delivered as above.

Steel angles, 250,000 lbs., $1.80 per C.

Steel bulb angles, 4,000 lbs., $2.10 per C.

Steel Z bars, 18,000 lbs.. $1.80.

Steel channels, 320,000 lbs., $1.80.

Steel I beams, 18,000 lbs., $1.80.

They shall deliver any less or greater quantity. Open hearth, ship steel, qua specified in Lloyds rules, on or before June 1, 1907.

In competition with seven others. Ck. $1,500 with Finance Department.

March 19, 1907.—Robb Engineering Co., Amherst, 9 conical buoys, 7 ft. diame $245 each; no deposit.

March 19, 1907.—J. Matheson & Co., New Glasgow, 7 conical buoys, 3 can bu $1,270; no deposit.

March 19, 1907.—Burrill Johnson Iron Co., 63 buoys, $12,936; no deposit.

April 5, 1907.—Alex. Bremner, Montreal, International Portland cement in of 1,000 barrels, at $2.40 a barrel. In competition with two others; deposit, $240.

April 8, 1907.—Letter to C. Thomson Schmidt, Inspector of Government Stm Halifax: I herewith inclose a list of the accepted tenders for the construction of s buoys required for the maritime provinces. Contracts have been entered into w the different firms for the construction and delivery of the buoys, and I have to req you to make arrangements to have the necessary inspection made.

October 7, 1907.—D. J. Stevens, Asst. Inspector of Govt. Stmrs., writes to Thomson Schmidt, Inspector of Govt. Stmrs. at Quebec, as follows:—

'I beg to report that on the 2nd and 3rd inst. I examined and tested twenty-f 5-ft. can buoys under construction at the new Burrill Johnson Iron Co.'s works, N mouth; also examined 15 4-ft. can buoys and six 5-ft. conical buoys. Each of 5-ft. can buoys was subjected to a hydrostatic test pressure of 15 lbs. in my prese and upon the final tests they all proved good and tight under the pressure. The bu are in accordance with the plan and specification; the material is good and the w manship good, with the exception of the riveting and mooring eye forgings, which somewhat rough in appearance. When these buoys are cleaned, heated, oiled painted and weighed they will be fit to be taken delivery of. I examined fifteen can buoys and found them so far in accordance with the plan and specification. mooring eyes and doors have yet to be fitted before they can be tested. I exami

the work done on six 5-ft. conical buoys. The cone and bilge plates are formed, but not yet put together. The material and workmanship so far is good.

QUERY.—Why should the Assistant Inspector report to the Inspector? He seems to do so in every case.

October 25, 1905.—The deputy addresses a letter to Chas. Koenig, Inspector of Buoys and Lighthouses, Quebec, acknowledging receipt of photograph of best type of buoy for strong currents.

March 20, 1907.—Sam'l Gammon, Bathurst, N.B. Wooden lighthouse to replace mast light on Little Belledune Point, county of Restigouche, $1,100, in competition with four others, up to $1,820; no deposit. Bond for 'Two thousand five dollars' given, with other two names as sureties. (Query.—What inquiries are made about the financial standing of the sureties?)

April 11, 1907.—Charter Party, John E. Moore, St. John, for ss. *Lord Kitchener* up to June 7 or from day to day after that, to be employed in the lighthouse and buoy service in the N.B. agency of the Department of Marine and Fisheries, or any other lawful service, $125 per day.

Agrees that the crews shall take on board and discharge all cargo at the places of loading and unloading and that the department shall not be liable for the employment of extra labour in loading and discharging cargo unless the said minister so agrees.

In the event of loss of time from breakdown of machinery, boiler or hull due to their defectiveness, for more than 24 hours, the payment of the hire shall cease until she shall again be in an efficient state to resume the service.

REINFORCED CONCRETE.

July 18, 1906.—Tenders were asked for for the construction of 3 lighthouse towers of reinforced concrete—specifications prepared by the chief engineer. Tenders to be in by August 20.

Contract No. 57,1906—To be completed October 20, 1906.

August 18, 1906.—E. A. Wallberg (personally) writes Col. Anderson, chief engineer, as follows:—'We have to-day mailed our tender for the 3 lighthouse towers which you are calling for on Monday. I trust that you will be able to recommend our tender as I fear that there may be some people who do not understand this class of work who may quote less than it is worth, and I think that it would be a great mistake to let a construction so important and where heavy loads have to be carried, to any one who are not thoroughly familiar with both theory and practice of reinforced concrete, and who have not the proper experience and organization to carry it out. We will be glad to call on you at any time if you consider it advisable.

On same day (August 18) Wallberg (in his own name) writes to Deputy: In connection with our formal tender herewith for 3 lighthouse towers reinforced concrete, we beg to advise that these will be built in all particulars like to tower which we are now building for you at Cape Race, and we will embody all the small changes in details and stairs which were suggested by your engineers, and we will make all details entirely to their approval. We submit herewith a general plan of one of these towers. The structure will be anchored by having every alternate rod embedded 2 feet in the rock foundation and the tower will be built entirely in monolithic concrete in proportion of one of 'star' cement to two of sand to four small broken stone or equivalent proportion of hard clean gravel. The apparatus will rest on 2 steel beams. The upper floor with balcony, lower floor, stairs and tower itself will all be reinforced with steel bars as per plans.

Can complete them all in one month.

We are in a position to begin this work immediately on receipt of order and to complete the first tower in (from) 2 to 3 weeks and if you so require we can complete

them all in 1 month. We could submit a cheaper form of tower which we would also guarantee, but we do not feel justified in doing so and we trust that you will take into consideration the heavy design and heavy reinforcement which we are using and also our experience in doing this class of work. We sincerely trust to receive your esteemed order. We enclose our certified cheque herewith ($542.50).

Tenders.—Cape Magdalen tower, $3,300; Matane Tower, $3,600; Little Metis Tower, $3,900.

On a memorandum showing this tender dated August 23, 1906, and initialled by Mr. Stumbles, was written the following: 'The prices are reasonable and the towers can be erected this autumn which is a great advantage. Recommend acceptance, August 27, 1906, initialled B. H. F.—Crossed in red ink 'For Minister's approval, F. G., August 28, 1906.—Then initialled L. P. B.—(Notified August 29, 1906, W.W.S.)

Tender accepted and Tenderer to prepare his own Specifications.

August 29, 1906.—Deputy writes Steel Concrete Co., Limited: Your tenders for the Cape Magdalen tower at $3,300, the Matane tower at $3,600 and the L. M. tower at $3,900, have been accepted and a contract will be prepared and sent you for signature. In the meantime I have to request you to have plans and specifications of the towers prepared which will be embodied in the contract. You may prepare for the construction of the towers at once.

August 30, 1906.—Acknowledged. We will proceed with the work and forward plans and specifications to you in a few days.

August 31, 1906.—S. W. Black for Expanded Metal and Fireproofing Co., Ltd., Toronto, Writes chief engineer: We shall take it as a favour if you will advise us of the names of successful tenderers for concrete lighthouses on the St. Lawrence. Thanking you in advance for your courtesy. Chief engineer replies September 1: I have to advise you that the contract for at least one of concrete lighthouses has been awarded to the Steel Concrete Co., Ltd., of Montreal.

Shipment of Material Doubtful.

September 14, 1906.—E. A. Wallberg telegraphs B. H. Fraser: Mr. Parent, Que., advises may not be able to transport our materials Metis and other places this fall. I propose see him Monday. What can you arrange? Wire.

Engage ss. 'Aranmore' for that purpose.

September 15, 1906.—Deputy telegraphs P. E. Parent, Resident Engineer, Que.: Inquire from Holliday if *Aranmore* ready to convey materials Metis, Cape Magdalen and Matane. Wire reply. See Wallberg who will be in Quebec Monday. Ascertain if absolutely necessary to ship material at once. Crew of *Aranmore* must load and unload.

September 15, 1906.—Deputy telegraphs Wallberg Co.: 'Making inquiries and arranging about steamer to convey material for concrete towers. Copy of this endorsed.

Charter Party signed September 17, 1907.

Charter Party made and handed deputy for signature. W. W. S. 17/9/06.

Designs forwarded and Men engaged to start at once.

September 19, 1906.—E. C. Warren (for Concrete Co.) writes B. H. F. as follows: 'We are mailing you herewith prints No. 40, 41, 42 showing proposed designs for lighthouses at Matane, Little Metis and Cape Magdalen. The details of these 3 lighthouses are indicated on drawing No. 40. We have men engaged to start on this work at once and are arranging for shipment of materials and would therefore appreciate

it very much if you could give this matter your immediate attention and advise us at an early date.

Diameter of Towers.

September 26, 1906.—E. A. Wallberg (in his own name) writes B. H. F. Kindly wire me to-morrow about the exact diameter of the towers for Little Metis and also for Little Hope. (?) You have my plans and I do not know whether you want them built 10′ 1½″ or 10′ 6″ diameter. I have sent my foreman to Quebec to arrange for sailing to Little Metis as soon as possible. We have also shipped the iron and other parts for Little Hope (?) and are waiting your definite instructions regarding that.

September 27, 1906.—B. H. F. telegraphs Wallberg: Concrete towers to be 10 feet 2 inches outside diameter, radius of bolt circle 5 feet one quarter inch. Mailing details to-day.

Plans satisfactory except that stronger reinforcing required for towers.

September 27, 1906.—B. H. F. assistant chief engineer writes Wallberg (in his W's own name) confirming above telegram and continues: 'I inclose herewith detail for the lantern and beg to say that the plans submitted by you are satisfactory with the exception of the 60-foot tower for which we would require stronger reinforcing as follows: The vertical bars in the lower 20 feet of the tower to be ⅞-inch, in the central 20 feet to be ¾-inch, in the upper 20 feet to be ⅝-inch. Regarding the exact dimensions of this tower my telegram says 10 feet 2 inches. It would be quite satisfactory to make them 10 feet 1½ inches in outside diameter. Trusting you will be able to commence work on these towers at an early date and push them rapidly to completion.'

October 2, 1906.—Deputy telegraphs to Wallberg: 'Send 2 more copies blue prints lighthouses Matane, Metis, Cape Magdalen for contract.

October 1, 1906.—Wallberg writes B.H.F. replying your favour 27th ult.: 'We note that your bolt circle will be 5 feet ¼ inch radius and the outside diameter of the tower 10 feet 2 inches. This will leave the center of bolts ¾ inch inside of the outer diameter line, but as we are making the balcony concrete 12 inches thick where it joins the main wall this will give a good body for anchor bolts. These anchor bolts should not bed more than 8 inches to 9 inches into the concrete as it would not do to let them run down through being so close to the outside, and the 8 inch depth will give a great deal more strength than ever required. We call your attention to this detail so that if the bolts come very long they should be cut off so as not to break through the outside of the concrete. Kindly let us hear from you on this point. This letter is stamped (refer to chief engineer, October 4), and initialled B. H. F., W. P. A., 4/10/06. Also written across corner: 'Commissioner of Lights please have this noted by your erectors. 10/10/06, B. H. F., noted J. F. F.,' also stamped 'referred to Commissioner of Lights, October 13, 1906.'

Note.—There are four typewritten copies of the above letter on the file, on one of which across the corner is written 'File Gen. Steel Concrete file, J. F. F.'

October 3, 1906.—E. C. Warren (for Steel Concrete Co.) writes Deputy acknowledging his letter of 2nd inst. (which was a telegram to Wallberg and confirmation) mailing under separate cover 2 prints each of revised drawings (showing design for Little Hope lighthouse) for lighthouses at Matane, Little Metis and Cape Magdalen (and also 3 revised drawings). The reinforcing steel as shown on these drawings is in some cases larger than is necessary, but to facilitate delivery of material, we were obliged to use the sizes as indicated. Stamped refer to chief engineer and initialled B. H. F., W. P. A., 5/10/06. (These initials both look as if made by one hand) also stamped 'blue prints filed in my office under the No. 16606—14, 5/10/06, W. P. A., Chief Engineer.'

October 22, 1906.—B. H. F. telegraphs Wallberg Steel Co., weights of lanterns a apparatus, three towers Quebec district to be as in specification.

Chief Engineer instructs Parent to have the building of these towers closely inspec to make sure that good materials are used—Minute details given involving c tinual presence of Inspector.

October 27, 1906.—Chief engineer writes P. E. Parent, resident engineer, Queb 'As you are aware the Steel Construction Company has the contract for erecting n towers of reinforced concrete at Matane, Little Metis and Cape Magdalen, a materials for this work were sent down by the *Aranmore*,' with the exception crushed stone which Mr. Wallberg did not have ready when the steamer left. Y will understand that the strength of buildings of this class depends principally up the integrity of the concrete, and good concrete can only be made with crushed grani I have therefore to instruct you to have the buildings of these three towers most clos inspected to make sure that a good rich concrete is used and that only clean gran stone properly broken is put in the granite. The temptation to use soft local st to save trouble in breaking will be so great that it must be specially guarded again The inspecting officer in each case if he sees the least tendency to use inferior materi or to neglect the junction of one course with the next course or to neglect any st that would insure perfectly solid walls must immediately stop the work and rep by telegraph.

Sixty-two days after awarding of contract Resident engineer had not received cop of plans.

October 30, 1906.—P. E. Parent replies—I was informed only verbally of cert clauses of the contract entered into with Mr. Wallberg by the department, one of th being that the department had to deliver the construction materials on the ground the contractors. As I have not yet received a copy of the contract referred to, or the plans and specifications up to this date, I was not quite sure if this work was to done directly under my supervision. I must also state that I do not know who been appointed inspector for these different works.

Charter party for use of 'Aranmore,' dated 17th September, she has therefore be under charter for six weeks.

As to the kind of stone that has been used up to this date in the concrete w at Little Metis, I must inform you that this broken stone comes from Beauport, a is not broken granite but broken limestone. Should granite be absolutely requi and the limestone discarded by Mr. Wallberg should be notified in consequence. Wallberg's foreman has already refused to use the local stone, which he has found soft. As to the modes of conveyance at our disposal to deliver Mr. Wallberg's materi on the spots where required, I have to inform you that the steamer *Aranmore* left l week on her last trip to the straits of Belle Isle, and that at present we have ship at our disposition to go to Metis or Matane. You will therefore kindly instr if we are to rent a schooner or another ship for this purpose. Kindly send me t information as soon as possible by return mail so that I can act accordingly, and go Little Metis to inspect the works if you find it necessary. Please note that this seas is well advanced, and I am afraid that Mr. Wallberg will experience some difficulty preventing his concrete from freezing; moreover, if he undertakes the constructi of the Matane and Cape Magdalen towers after the one at Little Metis will have b completed, it seems to me that it would be greatly advisable to request Mr. Wallb to postpone the construction of the towers at Matane and Cape Magdalen until n spring.

Resident engineer to blame as he was aware of the necessities of the case from the first—See his communication with Wallberg, 14th September last.

October 31, 1906.—B. H. F., acting chief engineer replies—I regret that you w not sooner put in possession of the facts regarding this contract. However, there

no doubt that you were aware that material would have to be supplied at these places, and the department will be under a heavy expense if this is not done, and Mr. Wallberg is building towers under guarantee, and if he takes the risk of building them this season—that is his affair. At the same time it is necessary for you or one of your assistants to arrange for a thorough supervision of the work and no time should be lost in attending to this. As regards the delivery of material you were supplied with the fastest boat to be absolutely at your control to carry out such work for the balance of the season. It was understood at the time that the work would have to be rushed to the close of navigation, and you were specifically instructed to keep this boat for your own purposes and to see that no delay might happen. A letter was written to the agent the other day informing him that the *Aranmore* was chartered solely for construction purposes, and that the cost of the rental of the boat is paid out of the construction vote, and consequently this boat was to be used in the first instance for construction work, and that if any space was available it might be used to convey lighthouse supplies to the different stations if the *Aranmore* is not delayed in any way.

B. H. F. to Parent about Aranmore being used for other purposes than transporting materials for Wallberg.

That I take it would mean that supplies could only be sent to such stations where the boat was to call and this only in such quantities as could be unloaded while the boat was waiting at the station. If you have permitted the boat to be taken for other purposes, or have sent her down to the gulf under the direction of an officer in another service I shall consider that you are to blame for any delay or difficulty that may be met with in carrying on the construction work in consequence. I shall be glad to hear from you immediately that you have made some suitable arrangement for delivering Mr. Wallberg's materials to him at the various stations mentioned above without causing any delay in the erection of the towers.

Wallberg has to send prints of lighthouses to Parent.

November 7, 1906.—E. A. Wallberg writes W. P. A., chief engineer: 'Replying to your wire of to-day we will be pleased to mail Mr. Parent at Quebec a set of prints of the lighthouse towers to-morrow.

November 9, 1906.—Unsigned letter to P. E. Parent, Quebec: 'In compliance with a request received from Mr. B. H. F. I send you herewith a copy of the standard plan of steel tower.

Vessel waiting for stone.

November 9, 1906.—W. P. Anderson telegraphs E. A. W. Steel Construction Co.: 'Resident engineer, Quebec, reports, *Champlain* waiting for your broken stone. Must insist on materials being furnished without further delay. We hold you responsible for delay in completion of contract.

Department telegraphed to for plans and specifications.

November 7, 1906.—B. H. F. telegraphs J. M. O'Hanley, M. and F. Dept.: 'Plans of reinforced concrete towers and specifications must be sent Parent by first mail.

Specifications sent by Chief Engineer.

W. P. A. writes P. E. Parent: 'Mr. Fraser telegraphed O'Hanly to-day to send plans and specifications reinforced concrete towers to you by first mail. As we have no copies on hand, the only plans received from Wallberg having been used for contracts I have telegraphed him to furnish you with the plans. I inclose herewith the specification. I inclose copies of the original plans but these have been replaced by amended plans showing brackets on the two higher towers.

Wallberg applied to for plans.

November 7.—W. P. A. telegraphs Wallberg: Please send complete set plans reinforced concrete towers to P. E. Parent, M. Dept., Quebec, by first mail.

Parent's defence to acting Chief Engineer's indictment.

November 1, 1906.—P. E. Parent writes in reply to letter 31st ult.: 'I beg to state that after having consulted with Mr. J. U. Gregory, agent, Department Marine and Fisheries, Quebec, it appears that amendments were made to the charter party by Mr. Stumbles at Quebec by which the *Aranmore* was to do both construction and maintenance work, and an increased number of deck hands was to be provided for that purpose at the expense of both Messrs. Holliday Bros., and the department as it was found absolutely impossible to perform our work with less than 16 deck hands, while the *Aranmore* had only six when she was chartered. These amendments were made owing to the fact that the *Montcalm* was undergoing heavy repairs at Sorel, and that the agency here had no ships whatever to supply the lighthouses on the north shore of the St. Lawrence and the straits of Belle Isle this fall, and the supplying of these lighthouses being a vital question for the department something had to be done. Col. Gourdeau, Deputy Minister of Marine and Fisheries told Mr. Gregory over the telephone not to employ any schooners to supply the *Anticosti* lightship with coals, but to send the *Aranmore*, which he did. As the *Aranmore* has a very large carrying capacity I could not see any reason why she could not be used for both services, especially as she had to go to the very stations with ordinary supplies for the lighthouses, where we have a large number of men working at construction work, for instance, northeast Belle Isle, Cape Bauld, Cape Norman, Greenly island, Anguille, Cape Magdalen, Seven islands.

As to the delivery of the material for the construction of the towers at Matane, Metis and Cape Magdalen by the *Aranmore* for Mr. Wallberg, contractor, I may say that the *Aranmore* has already made a trip for this gentleman after having been idle waiting a few days for a certain amount of broken stone. When the steamer *Aranmore* was ready to start on her trip to the gulf on the 27th October, the contractors were by no means ready to ship any more materials down below. The *Aranmore* would then have had to wait here in Quebec a great number of days to transport a comparatively small quantity of materials and this at the rate of $300 per day. During this time work could not have been done easier in the straits, and as the season is well advanced the later the ship would have gone the more trouble and danger she would have encountered.

Stone not ready sixty-nine days after contract was accepted.

November 7, 1906.—Please note that the *Aranmore* is bringing back to Quebec on her return all the men that have been employed during this past summer season at the various stations where works are going on.

You are surely aware that after November 1 the season in the straits is very rough, and that it is not advisable to leave gangs of men there to work, say a day per week, and that it is better to bring them back to Quebec as early as possible after this date.

After many attempts, we succeeded in securing one schooner, whose captain was willing to go down to Cape Magdalen, but his charges were exorbitant, that is, $10 per ton weight, or $800 for the entire cargo.

Mr. Gregory and I thought it advisable to ask the department to let us use the *Champlain* for this trip, which request was granted. Yesterday, the *Champlain* took on board a good portion of Mr. Wallberg's materials, but we learned that the stone was not ready, and the steamer is at the wharf waiting for the delivery of same. As soon as everything will be on board, she will proceed down to Matane and Métis, cancelling her trip to Cape Magdalen, as I am aware that it is most probable that Mr. Wallberg will abandon this station this fall and carry on the works there only

next spring. (This letter evidently written by Gregory,—Parent not equal to any such performance.)

Steamer still delayed.

November 9.—Wallberg writes W. P. A., acknowledging telegram steamer waiting for his stone. Says: We are doing eevrything we can to hasten sailing.

Memo. for Mr. Parent.

November 8.—If Mr. Wallberg explains or shows that the towers are well under way and have reached a considerable height, he is to use his judgment about sending down material to finish the towers. It must be distinctly understood that the department assumes no liability after to-day. If the boat reaches the places and has difficulty, or finds it impossible to land the stuff immediately, she is not to remain. Signed B. H. F.; dated at Quebec, November 8. Written across corner: 'File. No action. W. P. A.'

Just finishing at Little Métis.

December 4.—Wallberg Steel Co. writes W. P. A.: Advises he is just finishing at Little Métis. Will leave our staging up and leave our tools and other materials till spring, so that in case any minor points of finish are required, then they can be done to advantage. We have also our forms made and have made a beginning on the work at Matane, but we have closed it down for the season. Have also delivered all the iron work for both Matane and Cape Magdalen. Would be glad to have you arrange to make us payment for the Métis tower, and in such case we will not ask for any estimates on account of the other two this fall.

Wallberg wants payment on account.

December 11.—B. H. F. telegraphs P. E. Parent, Que.: Advise me what amount can safely be advanced on account construction concrete towers.

December 6.—Wallberg writes department: Inclosing herewith duplicate contracts duly executed for the three lighthouses, at Little Métis, Matane, Cape Magdalen, and also the contract for Little Hope lighthouse towers.

Wallberg wants contracts on Pacific Coast.

December 6.—Wallberg writes B. H. F.: We understand that you will build a lighthouse at Prince Rupert, on the Pacific coast, and no doubt you will have a number of others as well. We would like to figure on these, as we are quite prepared to build on the Pacific coast, as well as anywhere else. Our foreman at L. M. reports that he is finished and is leaving there to-morrow, which will close our work for this season in that vicinity. Our men will no doubt remain at Little Hope to finish there, which I hope they will do in the next two weeks. I have a letter from Mr. Legere, who visited there some time ago, stating that all is going well. We should be able to do a large number of these promptly and in very good style next year, and we trust that you will give us an opportunity.

December 13.—Deputy writes Steel Concrete Co.: I herewith inclose copy of the articles of agreement with you for the construction of 3 reinforced concrete lighthouses. This copy has been completed and may be retained for your use.

Parent to say how much to be paid to Wallberg.

December 12.—P. E. Parent telegraphs from Quebec B. H. F.: Will advise you in a day or so what amount can safely be advanced on account construction concrete towers.

December 14.—P. E. Parent telegraphs from Quebec, B. H. F.: I advise ¾ cost of Métis concrete tower only to be paid Wallberg. Will report and see you next week.

Inspection at Little Métis by Parent.—Apparently none before this date, and too late.

December 15.—Parent writes chief engineer: That on 12th inst. he had vi the works that have been done by Mr. Wallberg at Little Métis. I have found concrete tower practically completed, and that portion which was visible, that is, first 40 feet from the ground, appears to be good substantial work.

As to the top part, it being completely covered by the wooden moulds, I c not examine it to ascertain the quality of the work.

The exterior of the tower, as well as the counterforts, present a very good app ance, except in a few places, where the surface is not smooth, stones being see the concrete; but this can easily be patched up with pure cement next spring. A the interior, everything seems to be in good condition, except the stairs, which require a finishing touch, and this again is proposed to be done next spring. I was by the lighthouse keeper, who has worked with Mr. Wallberg's foreman, that the weak spot might be the top of the lantern floor, as this was done when the wea was frightfully cold, and the different coats of cement then laid might not be fo to adhere very well next spring.

In a general way, it is almost impossible to exactly ascertain the quality of concrete tower, as everything is frozen hard. As soon as the sun begins to heat tower, it will then be easy to detect the faults, as, if there is any ice, snow or e water in the concrete, when these thaw and drain out, the faults, if any, will then ap As a result of my inspection, I beg to recommend the department to pay Mr. W berg three-quarters of the sum agreed for the construction of that tower, as I perfectly satisfied that the one-quarter remaining will be amply sufficient to gua tee the completion of the tower next spring in a satisfactory manner.

Stamped: 'Refer to cf engr.,' who endorses: 'Acct. pay ¾ of contract p W. P. A., 21/12/06.' W. W. S. writes in red ink: 'Contract price, $3,900. W. W. 22/12/06.' Acct. writes on it: '$2,925 paid on acct., Dec. 27, '06. O.'

Wallberg disputes with workmen.

December 26.—Letter from Frs. Parent to the minister about an account $115.20 for broken stone supplied to the Steel Concrete Co., Montreal, against wh he had drawn a draft at sight for that amount through the Banque Nationale, it had been returned with answer, 'We cannot get anything out of this compa He asks the minister to retain the amount out of what the government still owes the contract.

January 5, 1907.—Letter received from E. F. Hebden, general manager M. B. of saying they had received letter containing cheque for $2,925 in favour of E. A. W berg, president Steel Concrete Company, Montreal, and asking what disposition t were to make of it.

Dept. blunder.

January 9.—Deputy replies that it was a mistake. The cheque should have b addressed to the Steel Concrete Company, Merchants Bank Building. Initial A. W. O.

Disputes with workmen.

January 18.—C. Stanton, for deputy, writes Wallberg, inclosing copy of tra lation of letter from Joseph Jacquet and L. Florence in regard to non-payment wages on work at Cape Race and Little Hope. (See copy of letter annexed.)