

MR. DIETRICH: In support of the suggestion I may say that some time ago I had charge of installing quite a large system of water works and we had a great deal of trouble in getting the pipes to suit. I have no doubt that standard specifications would be of use.

THE PRESIDENT: We might form a committee on standard specifications again if Mr. Irving will move that.

MR. IRVING: I would move that the committee deal with water pipe only. If they go into standardizing every kind of engineering material they would have a heavy job. I refer merely to cast iron water pipe specifications. I think that could be done in about two hours. The trouble with committees of this society is that they are steered up against such big propositions that they get overwhelmed.

MR. LEACH: Before we adjourn Mr. President, I have a dim recollection that about four years ago a committee was formed, of which Col. Anderson was a member, and I was appointed a member, under Major Stewart as convener, to consider the question of engineering and military defence. I received a notice of my appointment to that committee but since then there has been an absolute blank. What has become of it?

THE SECRETARY: It died a natural death. The Chairman never did anything whatever in connection with the matter so far as I know.

THE PRESIDENT: It being one o'clock, we will adjourn now to meet again at three p.m.

AFTERNOON SESSION.

THE PRESIDENT: Gentlemen, before adjournment we were discussing the question of standard specifications and Mr. Irving had the floor.

Moved by Mr. T. C. Irving Jr., seconded by E. A. James, that a committee composed of Messrs. R. S. Lea, O. W. Smith, N. J. Ker, and the mover and seconder, be appointed to frame standard specifications for cast iron water pipe and to report to council. Also that the council shall have full power to deal with this report in regard to its adoption, amendment, or otherwise as they deem best.

Carried.

REPORTS OF COMMITTEES.

THE PRESIDENT: The next report is on the establishment of testing laboratories. Mr. Keefer is chairman of that but I am sorry to say he is ill and will not be at this meeting. I will ask Dr. Galbraith who was on this committee to take charge of this report.

DR. GALBRAITH: Mr. President, I am sorry to say that I am not in as close touch with the work of this committee as I ought to have been. A meeting was held with Hon. Mr. Pugsley and the representations that you see here were made to him and nothing more has been done. What the society is interested in is, what further action should be taken. This committee has not done a great deal of work. I do not feel afraid to blame the committee, because in doing so I am blaming myself. What we have to settle is whether we intend to push the question, whether we wish to frame a specification for the work of Government, so to speak; to study the question to such an extent that we could be able to give the Minister an estimate of the cost. It will have to come down to that I think before it is a practical thing at all. Unless we do something of that kind I feel sure that nothing more will be done. The subject is such a large one that I doubt if any single member of the committee had time to go into it. Unless we can get some person who is extremely well qualified for the purpose, to do the work, we are not likely to get much done. It is necessary to come down to details and it is for you to say what further shall be done.

MR. LEOFRED: Mr. Chairman, I think after reading this report that the society cannot say very much as yet, nor the Government either. An estimate of cost is necessary. I think the last part of the report might cause an encroachment on private practice. I do not think the Government should undertake testing work for private parties for pay. I doubt if the Government would be able to collect its pay; probably the collection would be deferred until after the next election. That is the way the laboratory would be carried on. I think there is nothing very practical in this report and certainly nothing that would induce the Minister of Public Works to take any action in the matter.

MR. ST. LAURENT: Mr. President, I think we should see the establishment of a testing laboratory, not for commercial purposes but for the advancement of science and of our technical knowledge. I think the committee should be continued and instructed to go into details if possible. They should be able to give the Government the figures of the expenditure that would be involved for proper quarters for the laboratory, proper equipment and the wages to be paid the staff, and the cost of maintenance. The committee should go into the question of what subjects are to be investigated and what matters tested for the general advancement of our knowledge. If we go to the Government prepared with these details I think we stand a good chance of having a laboratory started.

DR. GALBRAITH: I have a suggestion, Mr. President, that might move us one step forward. I think we might well urge upon the Government to appoint a commission to visit the United States laboratory at St. Louis, which is the one I have the greatest number of reports on. There is another also at Pittsburg. I think it would be proper for the Society to urge the appointment of such a commission and the Government would then be in a position to go on without further expense to this Society.

MR. ARMSTRONG: It might be well that they should enquire into the methods of the German Government as well. Not long ago there was a long article in the Canadian Engineer describing the institutions in Berlin.

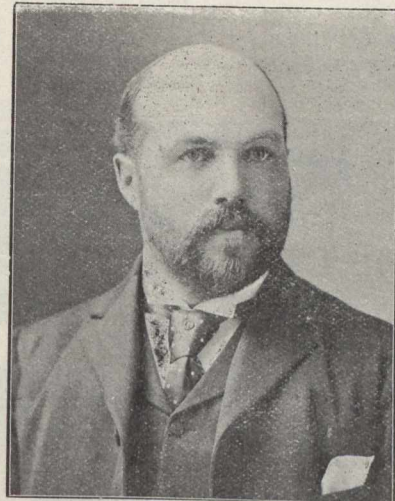
These are very extensive, probably more so than the Dominion is prepared to go into at present, but they are on the lines of education, testing and experiment, that the Government should undertake.

MR. SHERWOOD: Mr. Chairman, in the report of the committee made to the Government I think they omitted to state one rather important point which might have a good deal of weight with the Government, namely, that a great deal of the construction work in Canada was built to the specifications of the Dominion Government and also the Government has the supervising and approval of a great many plans of construction. It would be of great advantage to the Government if they had a means of testing the correctness of these requirements. A testing laboratory and competent staff of scientists would enable the Government to issue their specifications with a confidence they now lack. A suggestion of that sort might add weight to the report.

Moved by Dr. Galbraith, seconded by Mr. Leofred, that the committee on the establishment of testing laboratories be continued, and that they be instructed to urge upon the Government, through the council, the desirability of appointing a commission to visit the United States Government testing laboratories at St. Louis and Pittsburg and also government laboratories in other places, for the purpose of gaining the necessary information precedent to the establishment of a Canadian laboratory.

Carried.

THE PRESIDENT: The next is the report of the committee on Ties. This question was brought up last year. The committee had done a good deal of work and it was reported to the committee on transportation. The committee on transportation failed to do its duty and the sub-committee on ties was continued. They sent in the same report as last year. You will find the report in this year's proceedings at page 42. I will ask Mr. MacPherson, the chairman of the committee, to assist me in this.



GEORGE A. MOUNTAIN, RETIRING PRESIDENT.

MR. MACPHERSON: We were asked to make a report on ties and that is such a large question that we scarcely knew where to begin. Therefore, we took it up in a very general way, as to the reserve of tie material available and how to conserve the supply. We thought the Society would make certain recommendations to the Government, but I do not think any such action was taken. However, the Government have appointed a conservation commission which is taking some of the steps recommended in this report, although the report was not brought to the attention of the Government.

THE PRESIDENT: I would suggest that this committee be continued and that it should go into more details on the kind of ties, their dimensions and so on. I do not think we can put it in any better hands.

MR. KIRBY: I would ask whether, it would not be advisable to go into the question of preservation of ties. I mean the artificial treatment to add to the length of life of the tie.

MR. MACPHERSON: If the committee is continued their instructions should be definite and not cover too much ground.

Moved by Mr. Weller, seconded by Mr. E. J. Walsh that the committee on ties be continued and that it confine its attention more particularly to the matter of the artificial preservation of ties, their size and the timber best suited to the purpose. (Carried.)

THE PRESIDENT: The next report is that of the committee on road-bed and ballasting, under the chairmanship of the assistant chief engineer of the Canadian Pacific Railway, eastern lines. I regret that he is not present. I expect that he will be here to-morrow, but it may be that we had better not defer these reports. This committee is composed of men who are thoroughly posted on their subject, and I will ask Mr. McNab, if he will come forward and defend their judgment.

MR. McNAB: Mr. President and gentlemen, glancing over the report you will see that it refers to one particular work which this committee had undertaken to do, namely, the preparation of a specification for road-