

branch, but that the committee would like to keep them under advisement to use as suggestions for the coming year.

Mr. Ambrose called attention to the fact that the Toronto branch suggestions were already one year old and that there should have been plenty of time for their consideration and discussion.

"The Canadian Society has not waited upon other bodies in this matter," said Mr. Francis. "We took the lead and issued the first definite specification ever published for concrete and reinforced concrete. There have been reports by American societies, but not in definite specification form." Mr. Francis said that some of the clauses of the Toronto specification were the same as the Society's standard specification with the exception of phraseology.

"The committee is to be congratulated upon its former activity," said Mr. Ambrose, "but the suggestions made in the past year should have been laid before this meeting." Moved that the committee's report be accepted and the committee continued. Carried.

*General Clauses.*—No member of this committee was present and no report was received. Col. Anderson moved that the committee be continued. Mr. Oliver objected to the continuation of a committee that did no work. Mr. Butler said he knew that the chairman, Mr. Holgate, had done a very great deal of work upon this matter, but that on account of illness in his family he had been unable to be present to present a report. Mr. Ambrose complained that the Toronto branch had forwarded a very exhaustive report upon this subject a year ago, but that no acknowledgment of it had ever been received from Mr. Holgate.

Mr. Oliver explained that the Toronto branch had organized several committees to work along with those at headquarters, with the idea of stirring up enthusiasm. These committees had met with so little encouragement that at the last meeting of the Toronto executive the practice had been questioned, but he felt that it was a very good one and should be encouraged.

Mr. Oliver proposed an amendment to Col. Anderson's motion, that the committee be reorganized with a different personnel. Lost on division. Col. Anderson's motion was then put to the meeting and carried.

*Boiler Specifications.*—The secretary read a report by L. M. Arkley, chairman of the Committee on Uniform Boiler Specifications. At a meeting held in Montreal, August 18th, 1916, at which members from Amherst, N.S., St. John's, N.B., and Toronto, were present, it was decided that the six Toronto members of the committee form a sub-committee to compare the existing rules for the construction and inspection of steam boilers adopted by Ontario and the other Provinces of Canada, with the Boiler Code of the A.S.M.E.; and to formulate a specification based on those in use in Canada at the present time, with the addition of such specification of materials and other clauses of the A.S.M.E. code which are considered desirable to supplement the present rules without conflicting with them. The sub-committee hopes to be in a position to make a definite recommendation at the next annual meeting. Report adopted and committee continued.

*Cement Specifications.*—J. A. Jamieson said he had been surprised to hear that the committee on cement specifications had been discharged after its report had been handed in last year. He had differed from some of the other members of the committee in some essential

particulars, and had signed the specification for use during the year only, hoping that by another year the committee would be able to evolve a better one. In some points the present specification handicaps the manufacturers, which is not desirable. He moved that a new committee be appointed to reconsider the specifications.

Prof. Brown said that the American Society of Civil Engineers have changed their specification during the past year, doing away with tests of neat cement and depending entirely on cement mortar tests. The British Institution differs in many ways in their specification from both the American and Canadian bodies. The Canadian Society was uniform with the American Society in its requirements, but this is not so now. A new committee would be desirable. Mr. Jamieson's motion carried.

*New Business.*—Prof. C. H. McLeod read the following letter from J. B. Challies, secretary of the Research Council:—

"The Advisory Research Council are preparing to secure a confidential inventory of Canada's facilities for scientific and industrial research, in order that they may be able to consider ways and means for effecting:—

"(a) The co-ordination and co-operation of all research agencies.

"(b) The extension and expansion of existing research.

"(c) The mobilization of the scientific man-power available for research.

"To this end, suitable questionnaires have been prepared to be sent out to the following groups:—

"No. 1—Universities, colleges and technical institutions.

"No. 2—Government departments (Dominion and provincial).

"No. 3—Managers and directors of Canadian industries.

"No. 4—Members of scientific, professional and technical societies.

"Little difficulty is anticipated in securing suitable and prompt replies from groups 1, 2 and 4, but there may be some trouble in obtaining satisfactory results from group 3,—the manufacturers and industries of the Dominion.

The Council are aware that the success of the industrial inventory of the United States, taken a few months ago, was very largely due to the fact that the national engineering societies of the United States undertook, through their own organizations, to have the forms presented to the manufacturers throughout the country properly filled in and promptly returned to the director of the industrial inventory. The Council, therefore, feel that, if they had the advantage of the assistance of the Canadian Society of Civil Engineers in connection with their questionnaires to manufacturers and industries, satisfactory results would be achieved.

"Could the Advisory Research Council obtain the co-operation of the Canadian Society of Civil Engineers in this important matter? If so, it would be of great service to the country and would be very gratefully appreciated."

R. A. Ross, discussing the above letter, inferred that it had been read to the members in meeting instead of being dealt with by the Society's council in order that the members would be acquainted with the activities of the Research Council and know the opportunities for rendering national service that are now offered. Out of