

NEWS OF THE ENGINEERING SOCIETIES

Brief items relating to the activities of associations for men in engineering and closely allied practice. THE CANADIAN ENGINEER publishes, on page 90, a directory of such societies and their chief officials.

TORONTO BRANCH, CAN. SOC. C.E.

On the evening of March 5th, the members of the Toronto branch of the Canadian Society of Civil Engineers met to discuss the draft of standard specifications for concrete and reinforced concrete as presented at the last annual meeting of the society. (See *The Canadian Engineer*, January 22nd, 1914, page 198-203.) About 50 members of the branch were in attendance. Mr. A. F. Stewart presided.

Several hours were spent in an interesting discussion of the specifications. Among those who took part were Prof. P. Gillespie, Prof. C. R. Young, Messrs. C. W. Noble, A. W. Connor, D. A. Molitor, H. F. H. Hertzberg, Frank Barber, W. Monds, E. R. Clarke, C. S. L. Hertzberg, E. P. Muntz, T. R. Loudon and A. H. Harkness.

The discussion involved quite a number of clauses in the proposed specifications, relative to both design and workmanship. Among them might be mentioned proportioning of Tee-beams; vertically reinforced columns; use of re-rolled reinforcing bars, spacing of rods; requirements as to sizes of gravel and sand; percentage of compressive stress to ultimate compressive strength; reinforced cinder concrete; proportioning of columns; the use of stirrups; the weight of 1 cu. ft. of cement as $87\frac{1}{2}$ lbs.; modular ratio; bending moments of beams and slabs; form work; measurement of materials; machine mixing; temperatures of placing concrete, etc.

The scope which the specification should have was likewise thoroughly discussed, it being felt by some that the specifications of the Canadian Society of Civil Engineers should be drawn up as a guide to establishing uniformity in design among its members. Others felt that the specification might be complete in itself so that it could be referred to as occasion required by the engineer in his own specifications, in such a way that points not covered in his specifications, might be dispensed with by a clause requiring compliance with the standard specifications on concrete and reinforced concrete of the Canadian Society of Civil Engineers.

Another point that received a small amount of consideration was one in connection with the advisability of embodying in the specifications clauses covering flat slab design.

It was decided by motion to furnish each member with a copy of his discussion in order that he might prepare it for submission to the committee on reinforced concrete.

The meeting was in accordance with the resolution adopted at the annual meeting in Montreal, whereby the draft was to be subjected to a discussion by the branches, the discussion to be submitted to the committee with instructions to report to the Council of the Society.

The Toronto branch held a midday luncheon at the Woodbine Hotel on Thursday, March 12th. Mr. Geo. G. Powell, Deputy City Engineer, Toronto, was the speaker. A good representation of the members of the branch was present.

CANADIAN SOCIETY OF CIVIL ENGINEERS.

On Thursday, March 5th, Mr. J. Stadler addressed a monthly meeting of the Society in Montreal on the subject of "Pulp and Newspaper Manufacture."

NATIONAL CONFERENCE ON CONCRETE ROAD BUILDING.

The first National Conference on Concrete Road Building was held in Chicago, February 12th, 13th and 14th. The attendance was between 300 and 400, comprising engineers, contractors, laboratory experts, highway officials and cement representatives. During the sessions 14 reports and six addresses were presented, a notable feature of them all was the earnest endeavour on the part of the speakers to supply the demand for accurate data and scientific knowledge concerning road construction, serviceability and permanence. Although the proceedings of the Convention was restricted to concrete roads alone, with little or no reference to any other type, the subject in itself was found by no means narrow and the sessions produced some valuable information and animated discussion. The conference will undoubtedly result in a greater interest in the general subject of road building, and the educative work associated with the meeting will make itself felt throughout the country.

The results of the Conference were summarized in the recommendations of the Committee on Resolutions, the important points of which are briefly abstracted as follows:—

1. The aggregates should be clean and hard.
2. The sand should be coarse and well graded.
3. A rich mixture should be used.
4. The materials should be correctly proportioned.
5. The materials should be thoroughly mixed.
6. The inspection should be intelligent and thorough.
7. When in doubt, reinforce the pavement.
8. The sub-grade should be of uniform density, thoroughly compacted and drenched with water immediately before placing concrete.
9. The concrete should be of a viscous, plastic consistency.
10. After placing, the concrete should be immediately covered and kept moist and not opened for traffic for four weeks.

Besides the addresses, the principal reports received and discussed dealt with the following topics:—Contraction and Expansion of Concrete Roads; Aggregates for Roads; Preparation and Treatment of Subgrade Reinforcement.

Summaries of reports and addresses will shortly appear in *The Canadian Engineer*.

AMERICAN ROAD BUILDERS' ASSOCIATION.

The 11th annual convention of the American Road Builders' Association will be held early in December next in Chicago.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.

The Toronto section of the A.I.E.E. held its third regular meeting for the year on the evening of March 6th. Mr. Geo. H. Hill of the General Electric Company, Schenectady, N.Y., presented a paper entitled "High Tension Direct Current Railways." The address was illustrated by motion picture and lantern views.