#### AMERICAN ROAD BUILDERS' ASSOCIATION

THE Ninth American Good Roads Congress and the Sixteenth Annual Convention of the American Road Builders' Association will be held February 25th-28th, at Hotel McAlpin, New York City. The tentative program contemplates devoting February 25th and 26th to the presentation and discussion of papers, and February 27th and 28th to the consideration of reports to be submitted by several committees. The business session of the association will be held on the afternoon of February 28th, and the annual banquet on the evening of the 26th or 27th.

Among the subjects that will be presented for discussion are the following:----

National highways and federal aid for state highway improvements; relation of highways to railways and waterways; efficient methods of contracting for highway work during the reconstruction period; efficient methods of promoting highway bond issues; efficient methods of drainage for different geological conditions; foundations for heavy horse-drawn and motor truck traffic; methods of maintaining highway systems prior to construction by the state or county; economic utilization of labor-saving machinery; cost keeping for highway contractors; street systems, their relation to highways outside of urban districts; the efficiency of the French broken roads during the war; efficiency of bituminous surfaces under motor truck traffic; recent developments in the construction, maintenance and reconstruction of cement-concrete pavements; present status of brick pavements constructed with sand cushions, cement mortar beds and green concrete foundations; and recent practice in the construction of stone block pavements.

Committees will submit reports on the following topics:---

Regulations covering speed, weight and dimensions of motor trucks; methods of financing highway improvements for states, counties and towns; civil service requirements for highway engineering positions; sources of supply of unskilled labor for highway work; convict labor on highway work, organization, administration, camps and cost data; reconstruction of narrow roadways of trunk highways with adequate foundations and widths for motor truck traffic; methods of strengthening and reconstructing highway bridges for heavy motor truck traffic; efficient methods of snow removal from highways outside of urban districts; guarantees for pavements on roads and streets; and uniform highway signs.

Next year it is proposed to hold in connection with the convention, a comprehensive exhibit of road machinery, equipment and materials. But at the time when it was decided to hold this year's convention in New York, the war was still in progress, and it was considered impossible to have an exhibition on a large scale. It was therefore decided to limit this feature to the facilities afforded by the "Winter Garden" on the top floor of the Hotel McAlpin. The session of the convention will be held in the ballroom, which is also located on the top floor and adjoins the "Winter Garden."

### ENGINEERING INSTITUTE ELECTIONS

A<sup>T</sup> a meeting of the council of the Engineering Institute of Canada, held January 21st at Montreal, the following elections and transfers were announced:—

Members—A. J. Barnes, Halifax; I. P. MacNab, Halifax; J. S. Misener, Dartmouth.

Associate members—J. Griffiths, England; R. C. Harris, Calgary; J. W. Houghton, Winnipeg; W. G. Jones, North Vancouver; A. T. MacDonald, Kentville, N.S.; W. B. MacKay, Halifax; R. L. Nixon, Kentville; W. K. Scott, Montreal; G. L. Stephens, Halifax.

Transferred from associate member to member-C. R. Crysdale, Vancouver; E. H. Darling, Hamilton.

Transferred from junior to associate member-W. E. Hobbs, East Kildonan, Man.; D. Whittaker, Pincher Creek, Alta. 

# Letters to the Editor

### THE C.N.R. MOUNT ROYAL TUNNEL

Sir,—With reference to the interesting article on the above great work by H. K. Wicksteed in your issue for the 23rd inst., the reader might be led to believe that the only tunnels in the Old World which exceed this one in length, are the three great Alpine tunnels. This is incorrect, as the celebrated Severn Tunnel on the Great Western, and the Totley Tunnel, on the Midland Railway, in England, both exceed the Mount Royal Tunnel in length. The former, which is a subaqueous tunnel, by the way, is 4.36 miles long, and the Totley measures 3.54 miles against 3.25 miles for the Mount Royal tunnel. In justice to the engineers of these English tunnels, these facts should be noted.

C. O. THOMAS.

Montreal, P.Q., January 27th, 1919.

## CHIEF ENGINEER AND ASSISTANT—THEIR RELA-TIONSHIP AND ITS ETHICS

Sir,—In this country fifty years ago, the engineering "profession" was unknown. Then the engineer was considered a skilled workman with pluck enough to command and direct unskilled laborers; competent enough to estimate values; experienced enough to design details in a definite line of construction. He applied building methods suitable to the resources and financial standing of that epoch; large rubble foundations, wooden bridges, canals, quays and cribwork structures were his earliest field activities.

Later came railroad problems, structural steel developments, industrial researches demanding wider knowledge of natural resources and their utilization. The skilled workman had to make a study of these by himself. He had to become acquainted with combinations and devices, every day more numerous and complicated; not only to master these, but at the same time to develop his connections so as to come into closer touch with his competitors,—his future confreres.

Universities made place for new chairs in order to prepare the youth for this science, while older engineers organized themselves into a corporation, a parent organization, with the purpose of placing the young wheels in the right path leading up toward professional heights, so that engineers could compete honorably with any other liberal profession of the highest standing.

Such was our father's aim; such is ours. The engineer ought to be of efficient service to the public. To this end, he should be governed by special laws of professional ethics, and so act upon the principles of charity and brotherhood that he and his fellow-engineers should be recognized as a commanding body in their own field of action.

Every sunrise gives birth to new methods and new problems. Engineers should be in readiness for co-operation. They should merge their experiences; they need the resulting benefit as much as they need the discoveries of a university's research bureau. Most engineers are glad to offer their experiences for the welfare of humanity, the progress of industry. Discussion of difficulties is on their daily program, and they always expect that it shall be so conducted as to be perfectly understood and to facilitate the best conclusions.

This is the reason why there is no monopoly of authority in engineering, and there should not be. All are members of a same family. Professional expansion amongst engineers depends largely upon there being no chief to lessen individual initiative, but fellowship for the welfare of the profession, itself, and of the community as a whole.

These are the fundamental principles governing our aims. Engineers have to work shoulder to shoulder to report progress in different discoveries and developments, or in the enactment of regulations in economic methods of scientific