

CONVENTION OF THE AMERICAN ROAD BUILDERS' ASSOCIATION.

THE tenth annual meeting of the American Road Builders' Association was held in Philadelphia, December 9th to 12th inclusive. It is stated that the attendance exceeded in good measure any of the previous sessions. The registration of members and delegates approximated 1,100.

The convention was officially opened on Tuesday afternoon, December 9th, by Governor Tener, of Pennsylvania, who delivered an address on the good roads movement, in which he passed very commendatory remarks respecting the efforts of the various organizations and the receptive mood of the popular mind in the interests of road improvement.

Col. E. A. Stevens, Commissioner of the Department of Public Roads of New Jersey, read a paper on "Highway Officials, Their Duties and Powers," which dealt with the subject in considerable detail. It was followed by a discussion opened by Mr. A. N. Johnson, State Highway Engineer, Illinois, who explained fully the methods of road administration adopted by his and other States, emphasizing the dependency of success upon the "pay-as-you-go" system. Mr. A. R. Hirst, who occupies a similar position in Wisconsin, described the new road laws and the fundamentals of road making and maintenance with which he had to do. He enumerated the ways in which Wisconsin roads were financed to be as follows:

- (1) A municipality, the county and the State may bear equal shares of the expense.
- (2) The county may assume two-thirds.
- (3) A private citizen may guarantee one-sixth of the total expenditure.

"Division of Expanse, Responsibility and Authority Between Nation, State, County and Town" constituted a paper read by Mr. S. P. Hooker, Superintendent of Highways of New Hampshire, in which were explained the various methods that have been proposed for federal aid toward road construction. In this connection, he emphasized the fact that the question of federal aid should be given very careful consideration, and that any accepted arrangement for the extension of same, should be most wisely handled.

Mr. Nelson P. Lewis, Chief Engineer of the Board of Estimate and Apportionment of New York City, opened the discussion and emphasized Mr. Hooker's cautionary remarks concerning the neglect of careful consideration and planning as evidenced by previous cases where federal aid has been extended. Mr. Harold Parker, ex-chairman Massachusetts Highway Commission, also spoke, urging the appointment of a committee with international scope to investigate the matter, this committee to have three members, an engineer, a lawyer and a business man.

Mr. J. de Pulligny, director of the French Mission of Engineers to the United States, gave a brief description of the methods under which the important public roads of France were constructed, and paralleled with it the lack of organization which is in evidence in America. He remarked that the admixture of engineering ability and financial backing required organization to ensure success in road building. He stated that the French unit of assessment is the square mile, that towns do their own maintenance, and that 90% of the present French system are township roads, upon which is spent 80% of the road funds. The old national roads we hear so much about constitute less than 6% of the present system.

The session on Wednesday morning opened with a paper by E. L. Cranford, road contractor, Brooklyn, N.Y., who dwelt upon the relation of the contractor, the engineer and the inspector to each other. In his address, he showed the frequent lack of harmony, and explained numerous methods of redress, expressing a clear conception of the functions of each official. Prof. A. H. Blanchard, of Columbia University, opened the discussion in a very appreciable manner, corroborating the general opinions expressed by Mr. Cranford toward methods of making the relation and conditions more harmonious. Mr. H. W. Durham, Chief Engineer of the Bureau of Highways, Borough of Manhattan, N.Y.; Mr. F. E. Ellis, Manager of the Essex Trap Rock and Construction Co., Peabody, Mass.; Mr. Geo. S. Webster, Chief of the Bureau of Surveys, Philadelphia, and others continued the discussion, bringing out numerous suggestions worthy of due consideration for the improvement of conditions by intelligent co-operation.

A paper entitled "The Determination of the Amount of Re-alignment, grading and Drainage to be Done in Connection With Road Work" was read by Mr. S. D. Foster, Chief Engineer of State Highways, Pennsylvania. Among those who presented discussions were J. A. Johnson, Massachusetts Highway Commission; Mr. R. A. Meeker, Department of Public Roads, New Jersey, and Mr. J. H. MacDonald, Highway Commissioner, Connecticut. Another important paper was that by Mr. L. R. Grabill, Suburban Road Superintendent, Washington, D.C., who dwelt upon the factors covering the proper selection of road and street pavements.

Col. W. D. Sohier, Chairman, Massachusetts Highway Commission, in discussing Mr. Grabill's paper, emphasized the need of accurate traffic investigation and careful forecasting in future road improvement. He urged the adoption of an expense unit with traffic as a basis, suggesting the cost of maintenance per ton per mile over a unit width. He stated that the traffic in Massachusetts had doubled in two years' time, and that computation should be made with respect to the maximum traffic which will be encountered during the lifetime of the road.

Mr. W. A. MacLean, of the Ontario Public Roads and Highway Commission, gave a short address, outlining the work which the commission purposes doing in Ontario, and commenting upon the observations which have already been made through investigations. He suggested the method followed in England to secure stability of road foundation should be closely studied, and that roads in this country, after grading, be allowed a period of about three years of traffic in order to obtain natural settlement before road metal and surfacing be applied.

Papers giving details of construction of various types of roads and pavements were read at Thursday's session. Mr. Lynn White, Chief Engineer of the South Park Commissioners, Chicago, read a paper entitled "Bituminous Macadam and Bituminous Concrete." Other papers were "Earth Roads," by E. A. Kingsley, State Highway Engineer of Arkansas; "Sand-Clay Roads," by E. J. Watson, Commissioner, Department of Agriculture, Commerce and Industries, South Carolina; "Gravel Roads," by G. W. Cooley, State Engineer of Minnesota; "Concrete Roads," by E. F. Rogers, State Highway Commissioner of Michigan; "Birch Roads," by J. M. McCleary, Engineer, Cleveland, O.; "Wood and Asphalt Block," by H. H. Schmidt, Chief Engineer of the Bureau of Highways of Brooklyn, N.Y.; "Waterbound Macadam," by J. W. Hunter, Deputy State Highway Commissioner of