## ROAD CONGRESS REVIEWS WORLD RICHWAY PRACTICES

International Meeting in Milan, Italy, Pestured by Papers on Highway Design and Construction - Lack of Papers on Highway Economics - Next Congress Probably in United States

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Fifty nations of five continents, represented by a registration of some twenty-three hundred delegates, official and unofficial, contributed each its generous share to make the Fifth International Road Congress truly reflect the major position highways are occupying in the whole world's scheme of transport.

This congress, in response to the invitation of the Italian government, met in Milan on September 6, continued there until September 10, then rose to meet in Rome for the final three days' program. With the Duke of Bergsmo representing the king, the minister of public works, many high officials of the kingdom, the Italian organizing committee, and the general officers of the association, seated at the president's table and flanked by the military and the Fascisti guards, the formal sessions were opened in the higheric Castello Sforsesco before a large assembly of the delegates and visitors.

The final session was held in the Kational Mussum on the Capitoline Hill, Rome, Sept. 14. Here, within a stone's throw of the ancient Forum where the visitor may still walk the Via Sacra which leads out to the Applan Way. Benito Mussolini, head of the government, delivered the closing address in which he referred to the great network of reads possessed by Rome in antiquity. It was a colorful seems. visitly contrasting ancient and modern Italy. The colored uniforms and polished metal helmets of the guard, stationed at intervals from the very foot of the Capitaline Hill along the winding road to the plass where stands the statue of Marcus Aurelius, made an unforgetable picture as we made our way to the Miseum. And inside, as we followed through long corridors, tenanted with busts of figures out of the past, there was always that row of guards, more closely stationed now, to the very door of the assembly hall where,

standing beneath a heroic sculptured figure of Pope Pius VI. the head of the government pledged Italy to a program of modern highway improvement based upon the results of the read census and scientific studies.

Meetings in Two Sections - After the first session.

for the detailed consideration of the work before the congress, the delegates separated into two sections, each to consider three major subjects. To the first section the general reporters presented their conclusions relating to construction, materials and design, while simultaneously to the second section they presented those pertaining to city planning, traffic census, and the "Autostrade," or reads built and reserved for the exclusive use of the motor vehicle.

In the first section, perhaps the sharpest debate came upon the relative merits of tar and asphalts. In the second section, the most important division of opinion came upon the public policy involved in the granting of franchises to private corporations to build exclusive motor toll reads. An important resolution from the second section called upon the permanent association to establish an international committee to formulate international rules or standards for the traffic census for the purpose of reducing traffic records and measurements to a comparable basis.

To the American delegation perhaps the most welcome of all the attentions which were generously showered upon the delegates by their Italian hosts were the final words of President Luigi Luiggi when he said: "I will not say good-bye but rather, an revoir, until, as I hope, we meet for the next conference in the United States."

Outside the sessions of the Congress the interest of the delegates centered upon the recently completed 50-mile motor road very modern in its conception, connecting Milan with the Lakes Maggiors, Varese, and Como, and upon the Via Appia Antiqua, the Appian Way of Appius Clandius, which is popularly regarded as the most ancient of highways. Between these two, stratches the panorama of highway transport development for more than two thousand years.

The Road Congress Plan - The Permanent International Association of Road Congresses dates back to 1906. The general headquarters are established in France and the president general. Senator Mahieu, and secretary general. Mr. Ledavrian, are French. Each succeeding congress, however, is conducted by an organizing committee of the country issuing the invitation and the Italian committee, headed by Signer Luigi Luiggi, one of Europe's most famous engineers, not only had made excellent preparations for the congress itself but succeeded wonderfully well in expressing to the many-tongued delegates the warmth of Italy's hospitality and cerdiality.

The experience gained through former conventions is evident in the methods adopted for bringing order out of the many ideas and reflexes of many differing conditions. All papers submitted are printed some months in advance in the official languages and distributed to the delegates as soon as they are known. In this particular congress the papers were submitted under six major subjects. All papers on each subject were submitted to the organizing committee which referred them to six general reporters, highly qualified engineers of Italy. These six general reporters each digested the various papers on a single major subject and prepared conclusions which were printed in the official languages and distributed to the delegates to be discussed three at each section meeting as previously noted.

United States Papers Most Comprehensive - A full set of papers had been prepared by the engineers of the United States under the leadership of a committee made up of A. B. Fletcher, chairman. Dean A. N. Johnson, H. Eltinge Breed. Walter W. Crosby, and Arthur W. Dean. These papers constituted the most complete response of any country and they present a noteworthy contribution to the available works on highway engineering and modern highway transport. Many favorable comments were made by the engineers of other countries upon the value of these papers to them. It was evident that authentic material upon highway subjects prepared by the leading highway engineers of the United States received wide attention and the most serious consideration of the engineers of fereign countries.

Somewhat aside from the subject it may be remarked that the engineers of other nationalities are undoubtedly more eager and more conscientious students of the current engineering literature of other countries than is true generally of our own engineers. The conclusions reached by the general reporters reflected a careful consideration of the papers and although some changes were made as these conclusions were presented to the two sections of the Congress, in the main they received a favorable vote and thus became the final conclusions. They may be characterized as a careful but perhaps conservative expression of the best accepted thought and practice in the technique of highway engineering. They may be open to the suggestion that they are based too much upon theory and lack somewhat the practical character of conclusions drawn from broad and long experience.

Lack of Highway Roquomics Papers - The very important omission in the program was the disregard of the economic engineering phases. The highway itself was given too much attention. The kind, quality, and quantity of service required or that may be rendered is of greater importance. Also the relationship of highway transport to other transport agencies received no consideration. Looking back upon the experience in the United States, it was the tremendous growth in highway utilization that drove the engineers from the more mechanical aspects to the economic regard of highways and sway from debating over the qualities of various types of roads to a struggle to maintain highway service fairly acceptable to the public. Coincidentally the highway administrators find themselves confronted with the necessity of keeping in harmony with other transport agencies, notably the electric and steam railroads, through a respect for the service rendered by them and an acceptence of the limitations of economic highway transport.

The Milan program carried no subjects dealing with these phases which are the inevitable offspring of a tremendous highway traffic. There is no more significant evidence of the great difference that exists between the United States and other countries in the degree of utilization of highway

transport. Aurope is still regarding the motor vehicle as a luxury rather then a general public utility. Muropean engineers believe the motor vehicle will have a big future but the public does not. So the programs of the conference reflect perhaps the conventional technical aspects rather than the problems which will deminate with the intensive development of highway traffic.

Italy's her Motor foll Highway - There is no better illustration of the difference in viewpoint between the United States and Italy, for example, than the diremestances of the "Autostrade." Here is a toll road recerved exclusively for motor traffic. built by private capital under state franchise to extend for fifty years. It is laid over an entirely new right-ofway, without intersections at grade, no speed limit. sample width, commente parement with bituminous sida cont. easy curves, superclevated. In fact every proviaion is made for fast traffic between termini. The Italian condities proposed the "Autostrade" as one of the six subjects for discussion before the Congress. As developed by the general reporter, Sr. Isacco, the order of the Federal Highway Division, the matter presented encompassed both the rublic policy involved in granting private franchises for toll reads with nower to exclude all but motor traffic, and also the engineering conception of the highway itself and its operation.

Then this dual aspect was presented to the second division in an interdependent relation, both the English and the United States delegations found themselves in a somewhat embarrassing position. All the traditions of English speaking people demand freedom of the highest. They are apposed to any conception of the highest shift involves the exclusion of any kind or type of traffic that may demand service. To them the earliest meaning of the highest was not a physical thing but rather a right - the right to pass. The tell feature is not so foreign to our traditions since tell roads have been somewhat sidely used during our past history; but the old method of collecting tells at tell gates has served its purpose, speaking generally, and is no longer favored.

With this common background the Saglish and United States delegations found themselves unable to ascept the public policies maggested for general approval.

On the other hand the engineering conception of the plan was couragoous and highly representative of the best practice in the design of molern motor reads. Both of the dissenting delegations, undoubtedly, would cladly have complimented and endersed the engineering conception had this aspect alone been presented. Under the diremstances, the delegations withheld their vote with the expressed hope that at a future conference the benefit of the financial details of the operation over a mumber of years might be available. This brief disdustion does scant justice to a really remarkable development. The conditions are exceptional and while scarcely afforcing proof of the countness of the principle of the "Autostrade" for general explication, as here worked out the result is one of which the Italian people may well be proud, and they are. The whole project certainly reflects great gredit upon those who carried it through.

Moited States Suggested for Next Meeting -The delegation found a strong continent among the delegates for holding the next Congress, probably in the fall of 1939 or spring of 1930, in the United States. At the closing session in Milan a letter was presented to the assembly from the Secretary of Agriculture of the United States expressing the hope that an early meeting of the Congress might be held in the United States and this mot with much evident favorable response that President Inici Inici closing the session used the expression quoted above. In addition to the numerous contacts formed throughout the ressions with the delegates from other countries, the United States delegation gave a manber of informal luncheons for groups of the delegates and sacing these the sentiment existing for holding the next Congress in the United States was cost encouraging.