material, highway traffic analysis, highway finance, highway maintenance and also a report of the special investigation on reinforcement in concrete roads.

Research apparatus that has been successfully used in various experiments will be on display. This exhibit will not only include the apparatus used in laboratories, but will include also various loadometers, traffic counters and other instruments in use on the road.

On the evening of December 4, Mr. Herbert Hoover, secretary of the Department of Commerce, will speak at the highway research dinner.

This is the one meeting of the year where there is a rounded discussion of the practical application of highway research. Highway executives and engineers will find this meeting to be one of intense interest because of the correlation of research and practise.

## THE CARNOT CENTENARY

THE one hundredth anniversary of the announcement by the French physicist and engineer, Nicholas Leonard Sadi Carnot, of the principle of thermodynamics, later known as the second law of thermodynamics and the Carnot cycle, will be celebrated by American engineering, physical and chemical societies and educational institutions of New York, at a meeting to be held under the auspices of the Engineering Foundation, on December 4 at 8:15 p. m., in the auditorium of the Engineering Societies Building.

The program will be as follows:

Dr. Wm. F. Durand, president-elect, American Society of Mechanical Engineers, will preside.

Addresses, Illustrated by Lantern:

Dr. Michael I. Pupin, professor of electromechanics of Columbia University; fellow of the American Institute of Electrical Engineers; member, American Physical Society, National Academy of Sciences and the National Advisory Committee for Aeronautics, will speak on "Carnot's principle."

Dr. William LeRoy Emmet, consulting engineer of the General Electric Company; member, American Institute of Electrical Engineers, Society of Naval Architects and Marine Engineers, National Academy of Sciences and the Naval Consulting Board, will speak on the "Application of Carnot's principle in engineering."

Cooperating Institutions and Societies:

American Society of Civil Engineers.

American Institute of Mining and Metallurgical Engineers.

American Society of Mechanical Engineers.

American Institute of Electrical Engineers.

Engineering Foundation.

American Physical Society.

American Chemical Society.

Columbia University.

New York University.

Stevens Institute of Technology.

College of the City of New York.

Polytechnic Institute of Brooklyn.

Pratt Institute.

Cooper Union for the Advancement of Science and Art Committee of Arrangement:

American Society of Civil Engineers, George H. Pegram.

American Institute of Mining and Metallurgical Engineers, W. L. Saunders.

American Society of Mechanical Engineers, Joseph W. Roe.

American Institute of Electrical Engineers, L. W. W. Morrow.

Columbia University, George B. Pegram, Walter I. Slichter, Walter Rautenstrauch.

## SCIENTIFIC NOTES AND NEWS

Dr. Thomas Hunt Morgan, professor of zoology at Columbia University, has been awarded the Darwin medal of the Royal Society of London, for his work in zoology, and especially for research in heredity.

Dr. Hideyo Noguchi, of the Rockefeller Institute for Medical Research, New York, was elected corresponding member of the Accademia Medico-Fisica Fiorentina at the centenary celebration of its founding in May, 1924. The French government has conferred on him the decoration of Chevalier de la Légion d'Honneur.

DR. ÉMILE ROUX and Dr. Louis Marten, of the Pasteur Institute; Professor Roger, dean of the faculty of medicine; Inspector-General H. Vincent, and Professors Achard, Carnot, Legueu and Widal, of Paris, have been elected honorary foreign members of the Academy of Medicine of Rome.

THE Alvarenga Prize of the College of Physicians of Philadelphia, for 1924, has been awarded to Dr. Gordon Cameron, Victoria, Australia. His subject was "Pancreatic anomalies; their morphology, pathology and clinical history."

A. V. Vassiliev, formerly professor of mathematics at the Universities of Kazan and Petrograd, will celebrate in Moscow the fiftieth anniversary of his teaching activity on December 12.

Professor C. O. Bates, head of the department of chemistry at Coe College, is retiring under the Carnegie Foundation. He will continue his work as chemist for the city of Cedar Rapids, Iowa.

DR. E. J. LUND, associate professor of physiology in the University of Minnesota, has been named as an occupant of the American Association table at the Naples Zoological Station, for the period from December 10 to February 1 next.

Dr. George E. Brewer has been nominated for the