

something over 2,000,000 during an entire year, and not more than two American museums have reached that mark.

The exact number of visitors received at Field Museum from January 1 to November 12, inclusive, is 3,208,414. This represents an increase of 76 per cent. over the attendance for the entire twelve months of 1932, which was 1,824,202, and, with 49 more days of 1933 still to be added, the record will be even greater by the end of the year.

While, naturally, much of the increase may be attributed to the museum's proximity to the grounds of A Century of Progress, Mr. Simms points out that there has also been a large normal increase, continuing the steady upward tendency which has been noted year after year. This is shown by the fact that from January 1 to May 26, 1933, inclusive (the period prior to the opening of the exposition), attendance at the museum was 707,245, as compared with the 549,407 registered between the same two dates of 1932. Thus, even the preexposition period of 1933 shows an increase of 157,838, or more than 28 per cent., over 1932.

Of the more than 3,200,000 persons visiting the museum this year, 209,624, or only about six and one half per cent., paid the 25-cent admission fee charged on Mondays, Tuesdays, Wednesdays and Fridays; all the rest, numbering 2,998,790, or ninety-three and one half per cent., either came on Thursdays, Saturdays and Sundays when admission is free, or belonged to classifications such as children, teachers and students who are admitted free on all days.

According to Mr. Simms, these figures demonstrate the extent to which the museum has subordinated possibilities of increased revenue to the greater objective of providing service to the public on the widest possible scale. They show that the museum is fulfilling its mission as a great educational institution, and that full advantage of its tremendous resources for the dissemination of scientific knowledge is being taken and appreciated by citizens of Chicago and visitors to the city.

Some high attendance records for individual days have been made during 1933. There were two days on each of which the attendance was in excess of 65,000 persons, and seven days when attendance exceeded 50,000.

#### ANNUAL MEETING OF THE HIGHWAY RESEARCH BOARD

THE annual meeting of the Highway Research Board will be held in Washington in the building of the National Academy of Sciences on December 7 and 8. The subjects to be considered are as follows:

##### *Finance*

Further Studies of Taxation and Expenditures.

#### *Highway Transportation Economics*

General Principles for the Evaluation of Highway Systems.  
Physical Valuation of Highways.  
Use of Traffic Surveys in Evaluation of Highways.  
Methods for Determining Highway Transportation Costs.  
Economy of Highway Improvement.  
Wind Resistance of Motor Vehicles.  
Relations between Tires, Surfaces and Skidding.  
Motor Vehicle Tractive Resistance.

#### *Highway Design*

Roadside Development.  
Research in Highway Lighting.  
Use of High Elastic Limit Steel as Concrete Reinforcement.  
Portland Cement Macadam Pavement Experiments.

#### *Materials and Construction*

Relation between Composition of Cement and Durability of Concrete.  
Curing of Concrete Pavements.  
Effects of Calcium Chloride in Concrete.  
Fundamental Research on Durability of Aggregates.  
Fillers and Cushion Courses for Brick and Block Pavements.

#### *Maintenance*

Treatment of Icy Pavements.  
Maintenance Costs.  
Crack and Joint Fillers.  
Snow Control Experiments.

#### *Highway Traffic and Safety*

Studies of Traffic Behavior under Various Conditions, at Seventeenth Street and Constitution Avenue, Washington, D. C.  
Rules of the Road.  
Studies of Prevailing Speeds on Rural Highways.  
Analysis of Traffic by Moving Pictures.  
Alcohol and Motor Vehicle Drivers.  
Traffic Survey Methods and Forms.

#### EXCHANGE PROFESSORSHIPS

THE Massachusetts Institute of Technology has inaugurated a general plan for exchange of professors with other educational institutions and research laboratories, according to an announcement by President Karl T. Compton. This is the outgrowth of a suggestion made by Professor D. C. Jackson, head of the department of electrical engineering, in a paper before the Society for the Promotion of Engineering Education in Chicago last summer.

The plan provides for such an exchange arrangement each year for one member of the staff of each of the departments of study in the institute, embracing the fields of science, engineering, architecture and humanities. The nominations to these exchange professorships will be made by the heads or deans of corresponding departments in the cooperating institutions. Each institution will continue to pay the regular salary of its professor, while on leave. In

addition it is proposed to add a modest supplement to the salary of each of the professors involved in the exchanges, in view of special expenses of travel and of temporary living arrangements. Such exchange arrangements may be made with any educational institution in this country or abroad, and also with industrial research laboratories.

The purpose of the plan is to broaden the experience, acquaintance and educational outlook of the men, and to disseminate quickly and widely the best educational methods as they develop in various individual institutions. This exchange will be of mutual benefit to the cooperating institutions, since each may take and use whatever of advantage it learns through this personal contact with the other. Furthermore the plan will tend to overcome a certain tendency in institutions to become "ingrown" or "academic" by providing new contacts with outside personalities and ideas.

In general it is planned to limit appointments to men who still have years of active service ahead of them, yet who have already achieved some distinction. The first appointments will be made in the next academic year, 1934-35.

#### THE ELISHA MITCHELL SCIENTIFIC SOCIETY

THE Elisha Mitchell Scientific Society of the University of North Carolina celebrated on November 14 at Chapel Hill the fiftieth anniversary of its founding. Dr. Archibald Henderson, Kenan professor of mathematics in the university, reviewed the history and achievements of the society, and Dr. W. C. Coker, Kenan professor of botany, told of its publications and exchanges. The visiting speaker of the occasion was Dr. Ivey F. Lewis, Miller professor of biology in the University of Virginia. Dr. Lewis spoke on "Adaptation: the Fourth Property of Protoplasm."

The society was founded in 1883 by five members of the university faculty, who, though averaging scarcely twenty-five years of age at the time, possessed an indefatigable zeal for research and a firm determination to further the understanding of natural phenomena. They were R. H. Graves, professor of mathematics; J. A. Holmes, professor of biology and geology, who, after a subsequent period of service as state geologist, was instrumental in establishing the U. S. Bureau of Mines and who became its first director; W. B. Phillips, chemist, and later geologist of the State of Texas and president of the Colorado School of Mines; J. W. Gore, professor of physics and later dean of the college, and F. P. Venable, for fifty years professor of chemistry in the university, its president from 1900 to 1914, and president of the American Chemical Society in 1905.

The society was named by its founders in honor of Dr. Elisha Mitchell, a graduate of Yale College in 1813, who occupied various chairs of natural science in the university from 1817 until the time of his death. Dr. Mitchell lost his life on one of his numerous excursions to the mountains of western North Carolina for the purpose of conducting stratigraphic and altimetric studies. Detained by a thunder storm and overtaken by darkness on June 27, 1857, as he was descending the highest peak in eastern America (subsequently named Mt. Mitchell in his honor), he plunged precipitously over a cliff to his death.

The founders established the *Journal of the Elisha Mitchell Scientific Society* as a means of publishing the society's contributions to science. The journal, now in its forty-ninth volume, has enjoyed a continuous existence since the appearance of the first volume in 1884. It has published to date (1933) 8,530 pages of text and 909 plates, dealing largely with the biological and physical resources of the South. Nearly four hundred current exchanges, among which thirty-six foreign countries are represented, attest to the value of the journal in contributing to knowledge and to the significant part that it has played in building up the periodical collection of the university library.—X.

#### ROYAL SOCIETY AWARDS

THE King of England has approved of the following awards this year by the president and council of the Royal Society in respect of the two Royal Medals:

A Royal Medal to Professor G. I. Taylor, F.R.S., for his mathematical work in physics, geophysics and aerodynamics.

A Royal Medal to Mr. P. P. Laidlaw, F.R.S., for his work on diseases due to viruses, including that on the cause and prevention of distemper in dogs.

The following awards of medals have also been made by the president and council:

The Copley Medal to Professor Theobald Smith, of Princeton, for his original research and observation on diseases of animals and man.

The Davy Medal to Dr. W. H. Mills for his researches in organic chemistry, and for his work on the syntheses and properties of the cyanine dyes, and more especially for his investigation of novel types of asymmetric molecules.

The Hughes Medal to Professor E. V. Appleton for his researches into the effect of the Heaviside layer upon the transmission of wireless signals.

The following is a list of those recommended by the president and council for election to the council of the society at the anniversary meeting on November 30: