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:

Sir Frederick Hopkins, president; Sir Henry Lyons, treasurer; Sir Henry Dale and Sir Frank Smith, secretaries, and Lord Rayleigh, foreign secretary.

Other members of council.—Dr. E. J. Butler, Dr. W. T. Calman, Professor C. H. Desch, Professor T. R. El-

liott, Professor A. V. Hill, Mr. C. N. Hinshelwood, Professor A. Hutchinson, Dr. H. S. Jones, Professor J. C. McLennan, Dr. F. H. A. Marshall, Sir Charles Martin, Professor E. Mellanby, Professor R. Robinson, Mr. H. T. Tizard, Professor E. T. Whittaker and Mr. G. U. Yule.

## SCIENTIFIC NOTES AND NEWS

Dr. William H. Welch, president of the Board of Scientific Directors of the Rockefeller Institute since the foundation of the institute in 1901, has retired and has been succeeded by Dr. Theobald Smith. The trustees of the institute have elected Dr. Welch member emeritus of the board, a new office created in order to honor him.

Dr. George D. Birkhoff, professor of mathematics at Harvard University, received an honorary degree from the University of Poitiers, France, at the recent quincentenary celebration at the university.

Dr. Colin G. Fink, head of the division of electrochemistry at Columbia University, has been awarded the Perkin Medal of the New York section of the Society of Chemical Industry for 1934, in recognition of his contributions to metallurgy and electrochemistry. Presentation of the medal will be made at a meeting in New York City early in January.

A CHEMICAL INDUSTRY MEDAL, to be awarded annually for a valuable application of chemical research to industry, has been established by the American section of the Society of Chemical Industry, to take the place of the Grasselli Medal, now discontinued. The first award was made to James G. Vail, vice-president and chemical director of the Philadelphia Quartz Company. The presentation was made by Professor Marston T. Bogert, of Columbia University, at a joint meeting held recently at the Chemists' Club, New York, of the American Chemical Society, the Electrochemical Society and the Société de Chimie Industrielle. Professor Walter T. Taggart, of the University of Pennsylvania, described Mr. Vail's work, and the latter delivered an address on the many new and varied applications of water glass.

Dr. Frederick E. Turneaure, dean of the college of engineering at the University of Wisconsin, was recently made an honorary member of the American Society of Civil Engineers, by vote of the directors of the society. There are nineteen honorary members in a total membership of over fifteen thousand.

The Journal of the American Medical Association reports that Dr. F. G. Banting, professor of medical research in the University of Toronto, has been admitted to honorary fellowship in the Royal College of Surgeons. He was already a member of the college. He was welcomed by the president, Sir Hol-

burt Waring, and signed the roll in the presence of the council. It is three years since Dr. Banting was nominated for the fellowship, but this was the first opportunity to confer it on him.

Dr. Friedrich von Müller, professor of internal medicine at Munich, has recently celebrated his seventy-fifth birthday.

THE Goethe Medal of the German Empire has been awarded to Dr. Albrecht Penck, professor of geography at the University of Berlin.

Dr. Ross V. Patterson, dean of Jefferson Medical College, Philadelphia, was elected president of the Association of American Medical Colleges at the annual meeting which was held in Rochester and Minneapolis, from October 30 to November 1. Dr. Charles W. Poynter, Omaha, was elected vice-president and Dr. Fred C. Zapffe, Chicago, was reelected secretary. Nashville was selected as the place for the meeting in October, 1934.

M. Lemoine, director of the National Museum of Natural History at Paris, has been elected president of the Association of Museum Curators of France.

Dr. G. E. Harmon, associate professor of hygiene and vital statistics of the School of Medicine of Western Reserve University, was elected chairman of the section of vital statistics of the American Public Health Association at the recent meeting in Indianapolis.

Dr. Frederick G. Cottrell, of Washington, has been appointed chief consulting chemist of the Tennessee Valley Authority. Dr. Cottrell for some time has directed the fertilizer experiments for the authority, which has set aside \$4,000,000 for construction of fertilizer works at Muscle Shoals.

E. C. CRITTENDEN, chief of the Division of Electricity of the U. S. Bureau of Standards, has been appointed assistant director of the bureau in charge of research and testing, to fill the vacancy created by the appointment of Dr. Lyman J. Briggs to the directorship of the bureau. Mr. Crittenden has been connected with the Bureau of Standards since July 1, 1909.

At the Pennsylvania State College, Dr. F. F. Lininger, professor of agricultural economics and agricultural economist, has been granted leave of absence