John J. Abel, of the Johns Hopkins University, at the Atlantic City meeting of the American Association for the Advancement of Science, over which he was presiding.

The presentation was made by Professor D. D. Jackson, of Columbia University, vice-president of the club. The award was made to Dr. Abel for his "pioneer work on the isolation of certain products of animal origin which have been of significance in biology and of value in the treatment of disease. Dr. Abel's achievements include the isolation of insulin, the pancreatic hormone, in crystalline form which made possible the chemical study of this medicinal agent with all that this implies for the sciences of biology and medicine, and the isolation of histamine. a digitalis-like substance from toad skins. One of the earliest achievements in Dr. Abel's career was the isolation of epinephrin, the active substance of the suprarenal gland which is widely used in medicine as a heart stimulant."

The medal was endowed by Mrs. Madelyn Conné, of New York and New Orleans, in memory of her husband. It will be known as "The Philip A. Conné Medal" and will be awarded annually to an individual responsible for a discovery in chemistry which proves of value in medicine, by a jury of award selected by the Chemists' Club from among leaders of both the chemical and medical professions.

In connection with the acceptance of this endowment and the awarding of the first medal, Mr. George C. Lewis, president of the club, made the following statement:

In view of the laudable desire of Mrs. Conné to bring chemistry and medicine closer together in a common effort to alleviate human suffering, The Chemists' Club eagerly accepted the administration of this endowment and the privilege of awarding this honor medal each year. This action on behalf of our trustees is in keeping with the policy which our club has continually followed since its foundation about 30 years ago to further scientific development in every possible way. We indulge the hope that Mrs. Conné's generous action will be an incentive for chemical workers and will result in benefit to suffering humanity.

SCIENTIFIC NOTES AND NEWS

DR. CHARLES L. REESE, retired chemical director of E. I. du Pont de Nemours and Company, Wilmington, Delaware, has been elected president of the American Chemical Society for 1934. Professor Arthur B. Lamb, of Harvard University, becomes president of the society on January 1, and will serve throughout 1933, succeeding Dr. L. V. Redman, vice-president of the Bakelite Corporation. Professor Lamb has served as president-elect during 1932. The society has elected as district directors for 1933 Professor James F. Norris, of the Massachusetts Institute of Technology, and Dean Frank C. Whitmore, of the Pennsylvania State College. Dr. M. C. Whitaker, vice-president of the American Cyanamid Company, New York, was chosen a director-at-large. Councilors-at-large elected were: Professor James B. Conant, Harvard University; Dr. John Johnston, director of research, U. S. Steel Corporation, Kearny, New Jersey; Professor Charles A. Kraus, Brown University; Dr. David Wesson, consulting chemical engineer, Montclair, New Jersey.

OFFICERS of the American Pharmaceutical Association have been elected as follows: *President*, Robert L. Swain, Baltimore; *First vice-president*, Robert P. Fischelis, Trenton, New Jersey; *Second vice-president*, John C. Krantz, Jr., Baltimore; *Members of the Council* (for three years), W. D. Adams, Forney, Texas; H. V. Arny, New York, and H. C. Christensen, Chicago. The next annual meeting will be held in the Hotel Loraine, Madison, Wisconsin, during the week of August 28 to September 2, 1933.

AT the annual meeting of the New York Academy of Medicine Dr. Bernard Sachs was elected president and Dr. Fred P. Solley was elected vice-president.

DR. HERMANN CHRIST, the botanist of Basle, recently celebrated his hundredth birthday.

DR. G. ELLIOT SMITH, professor of anatomy at University College, London, has been appointed Fullerian professor of physiology at the Royal Institution to succeed Professor J. B. S. Haldane, whose tenure of office expires in January.

PROFESSOR SIR EDWARD SHARPEY-SCHAFER has intimated to the Court of the University of Edinburgh his intention of retiring from the chair of physiology at the end of the current academic year.

AT the ceremony of laying the cornerstone for the new library building at the University of Nancy, France, by the President of the Republic, the degree of docteur *honoris causa* was conferred on Professor Douglas Johnson, of Columbia University, in recognition of his contributions to geology and geography.

DR. WM. CHARLES WHITE, chairman of the committee on Medical Research of the National Tuberculosis Association, has been elected an honorary member of the Tuberculosis Society of Scotland. Associates and other friends of Dr. Samuel A. Brown, dean emeritus of the New York University and Bellevue Hospital Medical College, entertained him at a dinner at the Union Club on December 4, in recognition of his many years of service. Dr. George David Stewart was toastmaster. The speakers included Charles M. Schwab; Dr. Elmer Ellsworth Brown, chancellor of New York University, and Dr. Walter L. Niles, formerly dean, Cornell University Medical College. Dr. Brown resigned as dean last May after sixteen years' service. He had been associated with the university since 1896.

A RECEPTION was recently given at Harvard University to Dr. Earnest A. Hooton, professor of anthropology, Peabody Museum; Dr. Hugh O'Neill Hencken, assistant curator of European archeology, Peabody Museum; Dr. William Lloyd Warner, assistant professor of social anthropology, and Hallam L. Movius, on the occasion of their return from an anthropological survey of the Irish Free State.

PROFESSOR SAMUEL N. SPRING has been appointed dean of the New York State College of Forestry at Syracuse, and Clyde Leavitt acting assistant dean. Dean Spring, who has been assistant dean of the college, succeeds Dr. Hugh P. Baker, who is leaving on February 1 to assume the presidency of the Massachusetts State College at Amherst. Mr. Leavitt, who succeeds Dean Spring, has been acting director of forest research.

RALPH CHIPMAN HAWLEY, now professor of forestry in the School of Forestry of Yale University, has been appointed to the Morris K. Jesup professorship of silviculture, the chair previously held by the late Professor James W. Toumey. Mr. Hawley has been connected with the School of Forestry since 1907. Harold J. Lutz has been appointed assistant professor of forestry.

DR. CARL H. LENHART, professor of clinical surgery at Western Reserve University School of Medicine, has been appointed professor and head of the department of surgery to succeed Dr. Elliott C. Cutler. Dr. Lenhart will be director of surgery at the University Hospitals and in the outpatient departments of the school of medicine and the University Hospitals. Dr. Cutler became Moseley professor of surgery at Harvard University Medical School in succession to Dr. Harvey Cushing on the latter's recent retirement.

IT is reported that Dr. E. S. Cowles, who was connected with the mental clinic at the Church of St. Mark's-in-the-Bouwerie, will become a member of the staff of the cancer clinic conducted by Dr. Joseph Colt Bloodgood at the Johns Hopkins University.

He will divide his time between Baltimore and New York.

DR. HARVEY J. HOWARD, professor of ophthalmology in the Washington University School of Medicine, St. Louis, recently resigned in order to enter private practice in his specialty in St. Louis. For a period of ten years prior to his going to St. Louis in 1927, Dr. Howard was head of the eye department for the Rockefeller Foundation in the Peiping Union Medical College.

DR. LAURENCE H. SNYDER, of the Ohio State University, has been elected editor-in-chief of *The Ohio Journal of Science*, succeeding Dr. Herbert Osborn.

DR. T. FRANKLIN SIBLY, vice-chancellor of the University of Reading, has been appointed a member of the Advisory Council to the Committee of the British Privy Council for Scientific and Industrial Research.

SIR GEORGE S. BUCHANAN, senior medical officer of the British Ministry of Health, has been appointed president of the Permanent Committee of the Office International d'Hygiène Publique, succeeding M. Otto Velghe, secretary-general of the Ministry of the Interior and of Hygiene at Brussels, who had held the position since 1919.

PROFESSOR M. ISHIMOTO has been appointed director of the Earthquake Research Institute, Tokyo, in succession to the late Professor K. Suyehiro.

DR. E. C. JEFFREY, professor of plant morphology at Harvard University, has been granted leave of absence for the second half of the academic year.

DR. CHARLES J. CHAMBERLAIN, professor emeritus of morphology and cytology at the University of Chicago, on December 16 gave an illustrated lecture on "Cycads in the Field" to the University of Cincinnati Chapter of Sigma Xi.

DR. MARTIN H. FISCHER, of the College of Medicine of the University of Cincinnati, addressed the Western Reserve Chapter of Sigma Xi on December 7. His subject was "Fine Arts and the Chemist."

DR. HERMANN RANKE, professor of Egyptology at Heidelberg, gave on December 16, at the University of Wisconsin, an address on "Surgery in Ancient Egypt." This is the sixth annual address on the history of medicine under the William Snow Miller Lectureship, established in 1928 by the Phi Beta Pi Medical Fraternity.

THE second lecture to the faculty and students of the School of Medicine of the George Washington University on the Smith-Reed-Russell Society series was given on December 17 by Professor Edwin O. Jordan, of the department of hygiene and bacteriology of the University of Chicago. Dr. Jordan's subject was "The Common Cold and Influenza." The regular faculty seminar for December was given by Professor Vincent du Vigneaud, of the department of biochemistry, who spoke on "The Chemistry of Insulin."

DR. FRANKLIN M. HANGER, associate professor of medicine of the College of Physicians and Surgeons, Columbia University, gave a series of lectures and conferences from November 22 to December 17 at the School of Tropical Medicine, San Juan, Puerto Rico, and at the annual meeting of the Medical Association of Puerto Rico. The lectures were as follows. "The Recognition and Treatment of the Common Disorders of the Heart," "Diseases of the Liver and Spleen from the Medical Aspect" and "Problems of Infection."

THE twenty-fifth anniversary of the Eastern Section of the American Chemical Society was celebrated on December 22 in the room at Union College, Schenectady, in which the chapter was initiated. Dr. Willis R. Whitney, who recently retired as director of the General Electric Research Laboratory; Dean Edward Ellery, head of the department of chemistry at Union College since 1904; Dr. William P. Mason, of the Rensselaer Polytechnic Institute, and Dr. Marston T. Bogert, professor of chemistry at Columbia University, were the principal speakers at the dinner.

THE Journal of the American Medical Association reports that the Southern Medical Association at its annual meeting in Birmingham on November 16. awarded its gold research medal to Dr. Evarts A. Graham, St. Louis, Bixby professor of surgery at the Washington University School of Medicine, St. Louis, for his work on the diagnosis and pathology of inflammatory diseases of the gallbladder and liver. This is the fourth time the medal has been awarded. The committee on scientific awards which recommended Dr. Graham consisted of three men who had previously received the same honor for distinguished investigation in medical subjects: Drs. Charles C. Bass, New Orleans; John Shelton Horsley, Richmond, Virginia, and Kenneth M. Lynch, Charleston, South Carolina. The association presented the first award among the scientific exhibits to Dr. Rov R. Kracke, associate professor of bacteriology and pathology and chairman of the department, Emory University School of Medicine, Atlanta, for an exhibit on the experimental production of leukocytosis; second award to Drs. William C. Langston and Paul L. Day, of the University of Arkansas School of Medicine, for their exhibit on cataract in vitamin G deficiency, and the third to Dr. Seale Harris, Birmingham, for a report of clinical studies on hyperinsulinism. Dr. James R. Garber, general chairman

of the Birmingham meeting, in appreciation of the twenty years' service of Mr. C. P. Loranz as secretarymanager of the association, presented him with a loving cup as a personal gift.

A JOINT resolution authorizing the President to invite the International Congress of Military Medicine and Pharmacy to hold its eighth congress in the United States in 1935 has passed the Senate and is now before the House of Representatives.

THE sixth annual meeting of the Colorado-Wyoming Academy of Science was held on November 25 and 26 at the Colorado Agricultural College, Fort Collins. One hundred and thirty-one papers were presented. The general session was addressed by Professor A. S. Adams, of the Colorado School of Mines, on "A Defense of Mass Production." The meeting in 1933 will be held on December 1 and 2 at Laramie, Wyoming.

APPLICATIONS for the position of senior physical oceanographer must be on file with the U.S. Civil Service Commission at Washington, D. C., not later than January 17, 1933. The examination is to fill a vacancy in the U.S. Coast Guard Station at Woods Hole, Mass., and vacancies occurring in positions requiring similar qualifications, for duty in Washington, D. C., or in the field. The entrance salary is \$4,600 a year, less a furlough deduction of 8 1/3 per cent. The position is open only to men. Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience. Applicants must have been graduated with a bachelor's degree from a college or university of recognized standing, upon completion of a course which included mathematics up to and through both differential and integral calculus and at least twenty-four semester hours in physics. In addition, they must have had at least five years of progressive professional experience in dynamic physical oceanography. Applications for the position of engineer in charge of helium purification plant must be on file with the U.S. Civil Service Commission not later than January 17, 1933. The examination is to fill a vacancy in the Naval Air Station, Sunnyvale, Mt. View, Calif., and vacancies occurring throughout the United States in positions requiring similar qualifications. The entrance salary is \$3,800 a year, less a furlough deduction of 8 1/3 per cent.

THE dedication of the new Louis Marshall Memorial Science Building at the New York State College of Forestry has been set for February 23.

THE construction of a new building at Wake Forest College School of Medicine, a gift to the school from the family of the late Dr. William Amos Johnson, was begun in November. The building will be in colonial style to harmonize with older buildings at the college, with two stories and a basement. The new structure, to be known as the Johnson Medical Building, will cost \$60,000.

DISCUSSION

DISSEMINATION OF SCIENTIFIC KNOWLEDGE

Some few hundred years ago all scientific knowledge was recorded and disseminated by means of books and by word of mouth. As scientific activity increased this method became inadequate, and scientific knowledge became recorded and disseminated largely in the form of journals. Lately science has become still more active and even this method has become somewhat inadequate. It seems too slow in many cases, and with the journals reaching an alarming number the literature becomes too voluminous for the average scientific man to cover. The printing of preliminary reports in weekly journals and the publishing of abstract journals has helped the situation somewhat. But even this is not adequate.

Many scientific men feel that further improvements should be made in our system of disseminating scientific knowledge. The first improvement suggested is to make scientific knowledge more up to date. The time which elapses between the completion of a scientific report and the appearance of the report in print is generally much too long.

The second improvement suggested is to provide some means whereby the scientific man can find and read with comparative ease all current scientific literature in either abstract or detailed form. Even within the narrow boundaries of the special sciences the literature is becoming so extensive that the average worker does not attempt to read it all, and partly for this reason shamelessly neglects most current foreign literature. All workers in a special field of science, as chemistry, for example, are not equally interested in a certain scientific paper. Scientific men may be divided into three groups, according to their degree of interest in a scientific paper The first group comprises those who are actually working on the problem with which the paper deals. These people want the information promptly and in great detail. In the second group are those who are interested to the extent of reading the full report but do not mind waiting for it to appear in a journal. In the third group are those who are only mildly interested and do not care to read the report in detail, but are quite satisfied to read a summary or abstract.

It is felt that the suggested improvements can best be realized by the publication of journals of previews in the various scientific fields. Each scientific man will write the previews for his own papers. The previews should be very short and contain all the essential information of the full reports. The previews are submitted to the journal of previews after the full reports have been accepted for publication by a standard journal. Within one month the previews should appear in print. This scheme should satisfy all the conditions outlined above. The workers of the first group will here find prompt information, and will no doubt communicate with the author for the details. The second group will get the same prompt information, and will know where the full report is to appear. The third group will read the previews and feel that they have obtained sufficient information.

Since a journal of previews can not limit itself to a certain number of pages a year but must take all papers it receives, it is somewhat difficult to fix the subscription rate. This difficulty can be overcome, perhaps, by fixing the subscription rate on the page basis rather than on the volume basis. This could be accomplished in two ways: the subscription could be made for a certain number of pages and payment made in advance as is customary; or, at the end of a year (or one half year) the publishers could bill the subscribers for the number of pages they had received.

The publication of a journal of bacteriological previews is actually under consideration. This article is published in the belief that scientific men in other fields have felt a similar need and might be interested in such a journal in their field. To be most useful the preview journal should be international in scope. It would help considerably to eliminate the woeful lack of cooperation and appreciation among the scientific men of the different countries.

THE JOHNS HOPKINS UNIVERSITY

VIABILITY OF DROSOPHILA SPERMATOZOA IN SEA WATER

EINAR LEIFSON

In the course of certain experiments on artificial fertilization of Drosophila eggs during the past summer at Woods Hole, data of general interest were accumulated regarding the viability of Drosophila spermatozoa under various environmental conditions. On beginning this work, it became obvious that the primary essential for mechanical transfer of sperm masses was a non-toxic fluid medium in which the sperm would remain alive¹ for a sufficient length of

¹ Undulatory movement was arbitrarily taken as a criterion of life, though it is recognized that inactive sperm may be potentially capable of fertilizing eggs.