

subcommittee on mathematics decided not to attempt to present a formal report at this time. I desire, however, to take advantage of this opportunity to emphasize the fact that mathematical research is probably no less dependent upon financial support than research in the other scientific subjects.

It is true that the mathematical investigator seldom needs costly equipment beyond good library facilities, but what he gains in this direction he loses as a result of the fact that his most important discoveries frequently require very extensive development before they are fully appreciated even by the mathematical public. In some scientific fields discoveries of the greatest popular interest can be announced effectively in a few words, and hence the publications necessary to meet the direct needs of the investigator in these fields are comparatively inexpensive.

The lack of funds for the publication of extensive mathematical treatises and memoirs has had very baneful consequences. In the case of treatises on modern subjects the scientific value often increases much more rapidly than the size of the treatise. If an author who is perfectly competent to prepare a treatise of six hundred pages on such a subject is compelled to limit himself to four hundred pages, he usually finds it necessary to omit the developments which are most original and which would reflect most honor on the author and on the country in which the work is published.

The intrinsic scientific value of mathematical memoirs is usually not very seriously affected by brevity in presentation. On the other hand, this brevity tends to reduce the immediate influence of these memoirs, since it increases enormously the difficulties met by those who try to master them. The mathematical reader is often compelled to waste much time in trying to decipher what the author could have exhibited clearly if he had had a few more pages at his command. As compared with European publications American mathematical literature includes a comparatively small number of extensive memoirs.

The most expensive element tending to im-

prove research conditions is the providing of sufficient free time for the investigator. In this respect mathematics does not present a problem which differs materially from that presented by other subjects, unless it is assumed that the very abstract nature of his subject makes it unusually difficult for the mathematician to utilize odd moments. At any rate, I hope I have succeeded in making clear that American mathematical research could be greatly improved by more liberal financial support, and I presume the importance of mathematical developments needs no emphasis before a body of scientists.

G. A. MILLER,  
*Chairman*

---

#### SCIENTIFIC NOTES AND NEWS

DR. J. H. LONG, dean of the school of pharmacy and professor of chemistry at Northwestern University, has been elected president of the Chicago Institute of Medicine for the year 1917.

THE Royal Geographical Society of London has elected Dr. Charles Doolittle Walcott, secretary of the Smithsonian Institution, a corresponding member.

DR. J. J. R. MACLEOD, professor of physiology, school of medicine, Western Reserve University, has been granted leave of absence to act as professor of physiology in McGill University, Montreal, during the months of February and March.

PROFESSOR WALDEMAR LINDGREN, of the Massachusetts Institute of Technology, has gone to Chile in connection with geological work on some of the copper properties.

THE honor of knighthood has been conferred on Professor Jagadish Chandra Bose, of Calcutta, known for his work in physics and physiology.

PROFESSOR A. N. WHITEHEAD has been elected president of the British Mathematical Society.

MAJOR P. A. MACMAHON has been elected president of the Royal Astronomical Society in succession to Dr. R. A. Sampson.

DR. SMITH ELY JELLIFFE, of New York City, has been appointed editor of the *New York*

*Medical Journal* to fill the vacancy caused by the death of Dr. Claude L. Wheeler. Dr. Jelliffe was editor for several years of the *Medical News* before that periodical was discontinued, and is now managing editor of the *Journal of Nervous and Mental Disease*.

DR. MARY GAGE DAY, a sister of Professor S. H. Gage, of Cornell University, is leaving Kingston, N. Y., to make her home with her brother in Ithaca and devote her time to researches in biology. During the last twenty years she has practised medicine in Kingston.

MR. F. E. KEMPTON, assistant in the department of botany at the University of Illinois, has been granted leave of absence to take up the work of a plant disease survey for the St. Louis Smelting and Refining Company in the vicinity of their plant at Collinsville, Ill.

THE Arkansas Academy of Sciences was formally organized on January 11 at a banquet held at Little Rock for that purpose. Officers for the ensuing year are Charles Brookover, president; Morgan Smith, vice-president; Dewell Gann, Jr., secretary; Herbert A. Heagney, treasurer; Troy W. Lewis, permanent secretary. The meeting for 1917 will be held at Little Rock on October 12 and 13. We are requested to state that the Arkansas Academy of Sciences desires to affiliate with other scientific societies.

THE following awards of the Society of Engineers (incorporated) were presented on February 5: The president's gold medal to Professor C. G. Cullis for his paper on "The Mineral Resources of the British Empire as regards the Production of Non-Ferrous Industrial Metals"; the Bessemer Premium to Professor W. G. Fearnside for his paper on "The Mineral Requirements of the British Iron and Steel Industries"; the Bernays Premium to Professor J. A. Fleming for his paper on "Engineering and Scientific Research"; the Nursey Premium to Mr. J. E. Lister for his paper on "Modern Coal and Coke Handling Machinery as used in the Manufacture of Gas"; and the Society's Premium to Mr. Ewart S. Andrews for his paper on "The Design of Continuous Beams."

A COMMITTEE of the Cornell Society of Civil Engineers is receiving contributions to a fund for a testimonial to Professor Irving Porter Church. A part of the fund will be expended for a portrait of Professor Church to be presented to the university. The remainder will be used for a gift to the university in his honor.

AN oil portrait of Professor O. T. Bloch, according to the *Journal* of the American Medical Association, was hung recently with appropriate ceremonies in the hall of the Surgical Academy at Copenhagen, in preparation for his approaching seventieth birthday. The surplus left from the subscriptions for the portrait was presented to him, and he turned it over to the building fund of the medical society. He was for a long time on the editorial staff of the *Hospitalstidende* and has published numerous works in this and in Scandinavian, British and French surgical journals. He has also published several books, including one on the history of treatment of wounds from the earliest to modern times.

DR. MARTIN H. FISCHER and Joseph Eichberg, professors of physiology, University of Cincinnati, and Dr. Ludvig Hektoen, head of the department of pathology, University of Chicago, have been elected Cutter lecturers on preventive medicine and hygiene at Harvard University for the academic year 1916-17.

DR. A. HOYT TAYLOR, head of the department of physics of the University of North Dakota, has given a series of two lectures at Northwestern University and the Chicago Academy of Science on "Recent Advances in Radio Communication" with demonstrations of wireless telephony and telegraphy. Radio signals were amplified so as to be audible to an audience of several hundred and a musical concert was received by wireless telephone from a station some eight miles distant.

MR. JONATHAN HUTCHINSON gave the Hunterian lecture before the Royal College of Surgeons of England on February 12 on "Dupuytren's Life and Surgical Works."

ARNOLD VALENTINE STUBENRAUCH, professor of pomology in the University of California,

died at his home in Berkeley on February 12, 1917. A graduate of the University of California of 1899, Professor Stubenrauch was for ten years in the U. S. Department of Agriculture, resigning in 1914 his position as pomologist in charge of field investigations to return to service in the University of California. He was the first man to demonstrate that dates could be grown with commercial success in the Imperial Valley, on the desert in southern California; in association with G. Harold Powell he developed the pre-cooling method, which has greatly contributed to success in the shipping of fruit from California; he demonstrated that California grapes could be kept safely in cold storage for months if packed in redwood sawdust. He was of unusual power as a teacher and a stimulator of scientific activity.

DR. C. V. BURTON, known for his contributions to experimental and theoretical physics, died on February 3, owing to an accident at a British aircraft factory.

THE death in Paris is announced of Dr. Jules Dejerine, a member of the Paris Academy of Medicine and well known as a neurologist, at the age of sixty-eight years.

A. PAPPENHEIM, privat-docent at the University of Berlin, noted for his work on the morphology of the blood and the blood diseases, editor of the *Folia hæmatologica*, and the author of a work on the chemistry of dyestuffs, recently succumbed to typhus acquired in his professional work.

It is stated in the *Experiment Station Record* that plans have been approved by the building committee for the new agricultural building at the Maryland College for which \$175,000 was appropriated by the last legislature. A three-story and basement structure, with a front wing 200 by 68 feet, connected by an enclosed bridge with an auditorium seating about 1,000 people, and this in turn connected with a rear wing of the same dimensions as the front, is contemplated. The front wing is to be used for offices and classrooms and the rear wing for stock judging and exhibitions and experimental work. It is hoped that the structure will be ready for use next fall.

ACCORDING to the *Journal* of the American Medical Association, Dr. Raymond Tripier, of the School of Medicine, Lyons, whose death was announced in December, bequeathed to the University of Lyons 200,000 francs for the encouragement of special work in operative medicine and pathologic anatomy. He also bequeathed to the city of Lyons the sum of 200,000 francs, the annual interest of which will permit the acquisition of a work of art every five years.

THE Liebig Scholarship Society of Germany has recently been formed, with a capital of upwards of a million marks from German industries, for the purpose of assisting young German chemistry students to proceed with their studies, after their examinations, by working as assistants in the technical high schools.

THERE has been organized at the University of North Carolina a mathematical club whose members are drawn from the instructors and graduate students of the mathematical and allied departments. The following officers have been elected: Wm. Cain, president; Archibald Henderson, vice-president; J. W. Larley, Jr., secretary.

THE third annual meeting of Entomological Workers of Ohio was held at Ohio State University on February 2, with thirty members in attendance. The program consisted of reviews of projects and reports on investigations of members of the Ohio Experiment Station, the State Division of Orchard and Nursery Inspection and the department of entomology of the university.

THE council of the British Association of Chambers of Commerce is, as we learn from foreign exchanges, considering draft bills designed to carry out reforms in our systems of weights and measures and of coinage, and should the council approve of them they will be submitted to the Chambers of Commerce throughout the country. If there proves to be general agreement the association's bill will be introduced into Parliament. It is probable that a bill for establishing a decimal coinage will have first attention, the bill for introducing metric weights and measures not being pressed until the country has grown accus-

tomed to a decimal coinage. It is suggested that the simplest means of making the change would be the adoption of the present florin, which is the tenth part of a sovereign, as the unit. The existing farthing would be replaced by a "cent," equal to the hundredth part of a florin, instead of a ninety-sixth part as now. Sir Edward Holden, at the meeting on January 26 of the London City and Midland Bank, of which he is chairman, expressed himself strongly in favor of the adoption by Great Britain of the metric system.

A PRESS bulletin of the Geological Survey calls attention to the fact that the press dispatches describing the latest eruptions of Lassen Peak show a continued tendency to refer to the volcano as Mount Lassen. Perhaps it is thought that the name should correspond with those of some other famous peaks of the Cascade Range, such as Mount Shasta or Mount Rainier. But Lassen Peak, as the most active and interesting volcano in the United States, is especially entitled to be called by its own name, and acts of Congress and Presidential proclamations in creating and recognizing the Lassen Peak National Forest and Lassen Peak National Monument have given the name Lassen Peak a status of high rank in the geologic annals of the Cascade Range. The area has recently been set apart as the Lassen Volcanic National Park. The name Lassen Peak, according to the United States Geological Survey, Department of the Interior, is the only authorized form on maps, reports and gazetteers from the Whitney Geological Survey of California, in 1865, to the geomorphic map of California and Nevada published by the Earthquake Investigation Commission, as well as on the latest map issued by the Forest Service. Peter Lassen, the sturdy pioneer who guided many an early settler to the sunny lands of the Sacramento, lies buried in a lonely grave in Lassen County. A small, crumbling monument thirty miles from the peak marks his final resting place, but his greater and more enduring monuments are the county and peak named in his honor by a grateful people. The snow-capped Lassen Peak has piloted many an immigrant to the mountain pass. In the

early days of the Pacific Railroad surveys some pious monk called the peak St. Joseph's Mountain, but the names Lassen's Peak and Lassen's Butte soon came into general use. Whitney has shown the inappropriateness of the French term butte, which, translated exactly, means knoll. As Lassen never owned the mountain, in later years the possessive form of the name was dropped, and to correct an illicit tendency to wander from well-established usage the United States Geographic Board, in its decision of October 9, 1915, officially recognized the fact that the name of the mountain was *Lassen Peak*, not Mount Lassen.

THE United States Civil Service Commission announces an examination for expert electrical and mechanical aid, to fill a vacancy in this position at \$12.48 per diem, in the Bureau of Yards and Docks, Navy Department, Washington, D. C., and vacancies as they may occur in positions requiring similar qualifications. The duties of this position cover the expert maintenance and supervision of the operation of all navy-yard power plants, embracing the economical production, distribution and utilization of electric power for manufacturing, pumping dry docks, charging submarines, and tral heating, and production and distribution of for manufacturing; steam for power and central heating, and production and distribution of hydraulic power; also investigations of power-plant operating conditions, tests of plants and equipment, and efficiency engineering work in connection with improvement of operating conditions and instruction of plant operatives to obtain economical operating results. Competitors will not be assembled for examination, but will be rated on technical education, experience and fitness. Graduation with a degree of mechanical engineer or electrical engineer from a college or university of recognized standing, and at least ten years' subsequent experience in responsible charge of the design, installation and operation of central power plants and distribution systems for light, heat and power, with executive experience in handling successfully large numbers of power-plant employees, are prerequisites for consideration for this position.

A LETTER received at the Harvard College Observatory from Professor Henry Norris Russell, director of the Princeton University Observatory, contains the following preliminary values of the parallax of the star of large proper motion in Ophiuchus which have been determined by him from micrometric observations communicated by Professor Barnard. From the differences of the distances of stars  $\alpha$  and  $k$ , a solution in which the proper motion is eliminated in the usual manner gives a parallax of  $0''.69 \pm 0''.06$ . Measures of positives made from the plates of 1894 and 1904, when compared with the measures of 1916, give a proper motion of  $10''.38$  toward  $355^\circ.8$ . Assuming this proper motion, the distance measures of the stars  $\alpha$ ,  $c$  and  $k$  give parallaxes of  $0''.85$ ,  $0''.53$  and  $0''.66$ , and the measures of position angle  $\alpha$  a mean parallax of  $0''.75$ . The mean of these determinations is  $0''.70 \pm 0''.05$ . The absolute magnitude of this star on Kapteyn's scale is 13.6, and its real brightness is less than one three-thousandth that of the sun, making it the faintest star so far known.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE University of California has received through the death of Mrs. Elizabeth Josselyn Boalt an endowment of \$200,000 for the maintenance of professorships in law.

At a meeting of the governors of the South Wales University College, called to consider proposals for providing better science teaching after the war, it was reported that Sir W. J. Tatem had promised to provide a chemical laboratory which would cost at least £25,000, and that other promises included 1,000 guineas from the late Mr. Beaumont Thomas, 1,000 guineas from Mr. Dan Radcliffe, 1,000 guineas from Mr. J. Herbert Cory, M.P., 1,000 guineas from Mr. W. Beyron, and 2,000 guineas each from Mr. Morgan Wakely and Mr. Percy Miles.

HAVING decided to open its courses to women as soon as proper facilities can be provided, the college of physicians and surgeons, Columbia University, is now appealing for immediate contributions of \$50,000, so that these

facilities may be secured and women admitted to the school next September. It is proposed to erect a small addition to the present college buildings, sufficient to provide for the women students, until such time as new quarters are provided for the entire college.

ON February 23 the regents of the University of Michigan adopted a resolution confirming the union with the University of Detroit college of medicine and surgery. The terms of the merger are that the latter shall turn over its charter, real estate, equipment and hospital privileges to the university and that a fund of a million dollars will be raised for the development by the university of a graduate school of medicine in Detroit.

DR. THEODORE LYMAN and Dr. George W. Pierce have been promoted to professorships of physics at Harvard University.

DR. GEORGE B. PEGRAM, professor of physics at Columbia University, has been appointed to be dean of the school of applied science to succeed Frederick A. Goetze, who is now treasurer of the university.

PROFESSOR RAYMOND C. OSBURN, professor of biology at the Connecticut College, New London, Connecticut, has been elected head of the department of zoology and entomology of the Ohio State University, his appointment to take effect July 1. He will assume the duties carried for the last nineteen years by Professor Herbert Osborn, who was last year elected research professor and who will hereafter give his entire time to research work, including the direction of research by graduate students, and, for the present, the directorship of the Lake Laboratory and of the Ohio Biological Survey.

PROFESSOR DR. O. VAN DER STRICHT, professor of histology and embryology, University of Ghent, Belgium, has been reappointed research fellow in cytology, school of medicine, Western Reserve University.

DR. P. N. VAN KAMPEN, university lecturer at Amsterdam, has been appointed professor of zoology and comparative anatomy in the University of Leyden, in succession to the late Professor Vosmaer.