

been employed and the annual payment to professors in these fifty-one institutions has been increased \$421,712.

A further statement by the board showed that it is now paying the salary and traveling expenses at twelve of the state universities of the southern states of professors of secondary education engaged in promoting the establishment of public high schools. Since the beginning of this work, five years ago, 912 new public high schools have been established in the southern states; 824 teachers have been added to the schools which were already in existence, 656 new public high school buildings have been constructed at a cost of \$9,000,000, and the funds for the annual support of high schools have been increased by \$1,688,894.

The board has contributed between \$600,000 and \$700,000 to forty-one schools for negroes.

The board's statement calls attention to its work in helping to fight the boll weevil by farm demonstration in southern states. It has contributed \$400,000 for this purpose. The Department of Agriculture took over the work in some of the states so that the work of the general education board is now limited to Maryland, Virginia, North Carolina, South Carolina and Georgia. The salaries and expenses of 219 agents are paid by the board. These men are conducting demonstrations on 20,000 farms. They have also organized boys' corn clubs with a present membership of 50,000 and girls' canning and poultry clubs with a rapidly growing membership.

#### SCIENTIFIC NOTES AND NEWS

DR. W. H. EMMONS, of the University of Chicago, has been elected director of the Minnesota State Geological Survey, as well as professor in the university.

PROFESSOR J. G. LIPMAN has been made director of the experiment station and of the college farm at Rutgers College.

REV. JOEL H. METCALF has moved his observatory to Winchester, Mass., eight miles from Boston, where he expects to renew his work of photographing asteroids.

DR. RICHARD DEDEKIND, professor of mathematics in the Technical School at Brunswick, has celebrated his eightieth birthday.

At the Lister Institute Drs. E. E. Atkin and W. Ray have been appointed to be assistant bacteriologists, Mr. A. W. Bacot to be entomologist and Dr. Casimir Funk to be a research scholar.

PROFESSOR R. H. TUCKER, astronomer at the Lick Observatory, has returned to Mt. Hamilton after three years leave of absence. He has been in charge of the astronomical expedition to Argentina, under the auspices of the Carnegie Institution.

DR. and MRS. CHARLES W. ELIOT intend to sail from this country on November 7 on a trip around the world to last about eight months.

DR. R. R. GATES expects to sail for Europe on November 3, to carry on investigations during the winter in the botanical laboratories at the Royal College of Science, London.

A COMPLIMENTARY dinner was given on October 26 by the instructing staff of the Massachusetts Institute of Technology to meet the three professors who have retired this year from active work at the institute. These are Gaetano Lanza, professor of theoretical and applied mechanics; Peter Schwamb, professor of machine design, and Francis W. Chandler, professor of architecture.

DR. N. C. RICKER, professor of architecture, and Professor I. O. Baker, in charge of the department of civil engineering of the University of Illinois, have been appointed by Governor Deneen as members of the commission to revise and codify the building laws of the state of Illinois, which commission was authorized by the last general assembly of the state. The other members of the commission are Mr. R. E. Schmidt, Mr. W. C. Armstrong and Mr. W. S. Stahl, of Chicago; Mr. W. H. Merrill, of Lake Forest, and Mr. G. J. Jobst, of Peoria. Dr. Ricker is chairman of the commission.

DEAN C. B. CONNELLEY, of the School of Applied Industries of the Carnegie Technical Schools, has been appointed a member of the

new Pittsburgh Board of Public Education, which, under the new school code of the state, assumes control of the educational system of the city on November 13.

THE "Rôle of the Salts in the Preservation of Life" was the subject of the Wesley M. Carpenter lecture, delivered at the New York Academy of Medicine on October 19, by Jacques Loeb, M.D., Ph.D., Sc.D., of the Rockefeller Institute.

ETHER day was observed October 16 at the Massachusetts General Hospital in Boston by the usual clinics and luncheon. In the afternoon Dr. Simon Flexner gave an address on "The Biologic Basis of Specific Therapy." The alumni met for a banquet in the evening and were addressed by Drs. Simon Flexner, New York City; Charles F. Stokes, Surgeon-General U. S. Army, and Harvey Cushing, Baltimore, who is to be in charge of the surgical side of the new Peter Bent Brigham Hospital, now in process of construction.

A COURSE of six lectures will be given by Professor Franz Cumont, of Brussels, on "Astrology and Religion," at the University of Pennsylvania at 4 P.M. on the following days:

Monday, October 30—The Chaldeans.

Thursday, November 2—Babylonia and Greece.

Monday, November 6—Dissemination of Astrology in the West.

Thursday, November 9—Astral Theology.

Monday, November 13—Astral Mysticism; Ethics and Cult.

Thursday, November 16—Astral Doctrine of the Future Life.

THE twenty-ninth annual congress of the American Ornithologists' Union will convene in Philadelphia, on November 13, at 8 P.M. The evening session will be devoted to the election of officers and the transaction of other routine business. The meetings, which are open to the public and devoted to the reading and discussion of scientific papers, will be held in the lecture hall of the Academy of Natural Sciences, 19th and Race Sts. (Logan Square), commencing on Tuesday, November 14, and continuing for three days. Information regarding the congress can be had by

addressing the secretary, Mr. John H. Sage, Portland, Conn.

THE British government is sending out a further commission to central Africa in connection with sleeping sickness. This will be in charge of Colonel Sir David Bruce, who will be accompanied by Lady Bruce and assisted by Captain Hamerton, R.A.M.C., Professor Newstead, of the Liverpool School of Tropical Medicine, Major Harvey, R.A.M.C., Staff Sergeant Gibbons and Mr. James Wilson. The work of the commission will on this occasion be confined to Nyasaland, where over 40 cases of sleeping sickness have occurred since 1909. The commission, which is also under the auspices of the Royal Society, is expected to be absent from England for three years. Sir David and Lady Bruce and the other members will leave Marseilles on November 10, and will proceed up the Zambesi and the Shire rivers to Blantyre and Zomba, the capital of Nyasaland.

THE London *Times* states that Mme. Curie has asked M. Nenot, the architect of the "Radium Palace," which is being built on the site of a former convent in the Rue Saint Jacques, to add to it a laboratory for purposes of instruction. M. Nenot, who is official architect to the Sorbonne, has replied that the additional building would entail an expenditure of £1,600, and that he will ask the University of Paris to authorize its construction.

LECTURES before the Royal Geographical Society will be given as follows:

November 6—The Norsemen in America, by Dr. Fridtjof Nansen.

November 20—Volcanic Craters and Explosions, by Dr. Tempest Anderson.

December 4—The Geography and Economic Development of British Central Africa, by Sir Alfred Sharpe.

December 18—American Deserts, by Dr. T. McDougal.

AT the occasion of the two hundredth anniversary of M. V. Lomonosov, the Academy of Sciences of St. Petersburg founded the "Lomonosov Institute" for investigations in physics, chemistry and geology. A building

site has been provided by the city of St. Petersburg.

PROFESSOR FLORENTINO AMEGHINO, the well-known paleontologist and director of the Museo Nacional in Buenos Aires, died on August 6 at La Plata, at the age of fifty-six years.

DR. JOSEPH BELL, a distinguished Edinburgh surgeon, has died at the age of seventy-four years.

M. LOUIS-JOSEPH TROOST, the eminent French chemist, has died, aged eighty-five years.

A MONUMENT to Michael Servetus was unveiled at Vienne in Dauphiné, where he resided as the medical attendant of the Archbishop Paul Paulmier from 1541 to 1553. According to the London *Times* the monument represents the burning of Servetus at the stake (October 27, 1553). He stands in the midst of the faggots chained to a stone with his book of theological tracts tied to his girdle. On his head is a wreath of leaves covered with brimstone. The representative of the University of Paris, Professor Charles Richet, spoke of the discovery by Servetus of the pulmonary circulation of the blood as marvellous and as *prolem sine matre creatam* since Servetus, unlike Harvey, had not practised vivisection, nor had he proceeded by a complete inductive study of anatomy. His contemporaries could not appreciate his discovery; it was not immediately followed up, and seventy-five years elapsed before it was scientifically established by Harvey. Professor Rudolf Berger, of Berlin, deposited a wreath on the pedestal of the monument in the name of "democratic and liberal Germany." M. Édouard Montet, rector of the University of Geneva, was one of those who spoke of the intolerance of the sixteenth century, and of Calvin's share in the prosecution and condemnation of Servetus. He characterized Servetus as "that Spaniard of genius with the encyclopedic mind," and said that his name had become the symbol of modern toleration. M. Ferdinand Buisson, one of the deputies for the Seine department, described Servetus as having "maintained with sublime

simplicity against the pope of Rome and the pope of Geneva the right of free thought and the right to be the servant of his conscience and his reason alone."

THE members of the syndicate appointed to consider the provision of pensions for professors and others in the service of the University of Cambridge have issued their report. According to the abstract in the London *Times* they say that while they can not recommend a contributory scheme they propose that the university should establish its own pension fund rather than enter into an arrangement with an assurance company. They have aimed at providing pensions for professors, readers and certain officers on the basis of compulsory retirement at a given age; the maximum pension to be £500 a year, or five sixths of the stipend, whichever is less, and to be inclusive of any college pension, stipend or emolument. They recommend that 70 should be the age at which retirement should be required, but they think that, if and when funds are available, this age should be lowered to 68 or even 65. Their main recommendations are: (1) That every professor, reader and university officer appointed to an office included in one of three schedules should be required to retire at the end of the academic year in which he attains the age of 70, and should receive a pension if he has served in the office of professor, reader or university officer for 15 years in all. (2) That professors and readers retiring at the age of 65 should become emeriti professors and readers without statutory duties and powers. (3) That professors with a stipend of £600 or more, the university librarian and the registrar should receive a maximum pension of £500 a year, and other professors, the readers and the other university officers a maximum pension equal to five sixths of their stipend. (4) That professors, the readers and the university officers should receive as a pension an annual payment equal to one twenty-fifth of the maximum pensions for each year of service. (5) That professors, readers and university officers under the age of 60 when the scheme comes into operation shall have the option within a year of joining the scheme.

THE *Geographical Journal* has received accounts of the progress of Dr. Zugmayer's expedition in Baluchistan. He went westward by Sumiami to Bela, and thence to Gondrani (where he examined the remarkable cave-dwellings), reaching Ormara on April 20. He found the people of this region extremely primitive in their mode of life. Gwadur was reached towards the end of May, and the second stage of the journey, the crossing of Baluchistan in a northeasterly direction, then began. Intense heat was experienced, temperatures of 127° F. in the shade and 158° in the sun being registered. Particularly trying were the hot sand-storms, during which travel is quite impossible, the human body losing more than a liter of water per hour by evaporation when they are at their height. In spite of all difficulties, Dr. Zugmayer was able to secure valuable collections of animals and plants, and also to make important zoogeographical observations in a region which is the meeting-point of the European, Inner Asiatic and Polynesian realms. Crocodiles were met with up to the Persian frontier, but land-snails and *Salmonidæ* were absent. Rats also were entirely wanting, though epidemics of plague are frequent. The traveler is inclined to connect the epidemics with the arrival from the north of vast flights of ducks, and he endeavored to obtain evidence as to the possible rôle of these as disseminators of plague, and also to find a reason for the visit of such birds in summer to such a burning region. On June 22 the caravan reached the small garrison of Turbat, and the worst of the heat was then left behind. Climbing a pass, the party reached the interior plateau of Baluchistan, attaining an altitude of over 3,000 feet, with a proportionately lower temperature, at Shakrok. The inhabitants of this interior region presented a marked contrast with those of the coast lands in their higher culture. The date-palm here supplies the staple article of diet, and its harvest is celebrated by festivals. Panjgur was reached on July 6, and was made a center for collecting trips and haunts. Dr. Zugmayer expected

to be back at Karachi at the end of October, traveling by way of Kelat and Quetta.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE will of Miss Emma Carola Woerishoffer leaves \$750,000 to the trustees of Bryn Mawr College, of which she was a graduate.

THE estate of John S. Kennedy is even larger than has been previously announced. The share of Columbia University is \$2,429,943. The New York Public Library receives \$2,779,790; the Metropolitan Museum of Art, \$2,929,943; the Presbyterian Hospital, \$1,514,086; New York University and the Presbyterian Board of Aid for Colleges, each \$976,647; Robert College, Constantinople, \$1,847,295. The specific bequests, not dependent on the size of the estate, include \$100,000 each to Yale, Amherst, Dartmouth, Bowdoin, Hamilton and Glasgow.

WILLIAMS has received a gift of \$35,000 from the estate of Mrs. Frances E. Curtis for the endowment of the Edward Brust professorship of geology and mineralogy.

ABOUT \$1,000,000 has been collected for establishing a residential Hindu University at Benares with an adequate European staff.

GROUND was broken last week for the Wolcott Gibbs Memorial Laboratory of Harvard University. This building, designed for research in physical and inorganic chemistry, will cost when completed about \$72,000. It was given and endowed by Dr. Morris Loeb, Mr. James Loeb and many other friends of Dr. Gibbs and the university.

THE Association of American Universities met at the University of Chicago on October 26 and 27.

THE budget of Oberlin College for the ensuing year contains a special appropriation to be used in defraying the expenses of administrative officers, professors and associate professors who wish to attend meetings of educational and scientific societies.

New laboratories, completely equipped for post-graduate medical instruction and research, have been organized and opened at the