

are known to be in different parts of the State. There are no headquarters for these collections, or for a typical series from them, nor is there any record covering the entire range of forms or number of geographical areas. Many specimens pass to foreign countries without a record or photographs being taken for the State. It is not the desire of the Wisconsin people to prevent the study of the antiquities of the State by outsiders or even their acquirement of specimens, but rather to secure records, drawings and other data for a central State collection to be available for study by all. Eventually State appropriations for a survey of the mounds are to be sought.

The Wisconsin Society of Natural History was founded by Increase Lapham and others, who began archeological work on a firm basis. It now proposes to establish a new grade of membership in the archeological section, for people living at a distance from Milwaukee. The regular membership fee is three dollars per year. The fee for the new grade will be one dollar. A meeting will be held at the Milwaukee Public Museum in May, to which all known students and collectors of Wisconsin archeology residing in the State will be invited. The object of this meeting will be to discuss ways and means for the study and preservation of Wisconsin antiquities.

It is hoped that students and collectors will be brought into closer relationship by the publication of a bulletin, which, it is expected, will be established as a result of this meeting. The foundation of an anthropological reference library, the lack of which is keenly felt, and a central place of record, where reports of explorations may be heard and discussed, is also expected by the committee as an outcome of the meeting.

The people interested in this movement may do lasting good by striving to preserve the prehistoric mounds by enclosing them in parks, by a close cooperation with the State University, by a broadening of the proposed archeological research into that of general ethnology, and, finally, by the foundation of a permanent department of anthropology in the University.

HARLAN I. SMITH.

SCIENTIFIC NOTES AND NEWS.

AT the annual meeting of the American Academy of Arts and Sciences, held on May 8th, it was unanimously voted to award the Rumford Medal to Professor Elihu Thomson 'for his inventions in electric welding and lighting.' The Academy has granted to Professor Theodore W. Richards, of Harvard University, the sum of \$500 from the income of the Rumford Fund, in aid of a research upon the Thomson-Joule effect.

PROFESSOR J. H. VAN'T HOFF, of the University of Berlin, will give a limited number of lectures on physical chemistry at the Kent Chemical Laboratory of the University of Chicago, beginning on June 19, 1901.

M. BERTHELOT, the eminent chemist, ex-Minister for Foreign Affairs, and permanent secretary of the Paris Academy of Sciences, who has been elected a member of the French Academy in succession to M. Bertrand, the mathematician, was officially welcomed to the Academy by Mr. Lemaitre on May 2d.

M. ZEILLER has been elected a member of the botanical section of the Paris Academy of Sciences in the place of the late Adolphe Chatin. M. Zeiller received twenty-five votes, while twenty-two were cast for M. Renault. MM. Bureau Costantin and Mangin were also candidates.

THE following fifteen candidates have been recommended by the Council of the Royal Society for election to membership: Professor Alfred William Alcock, M.B., Mr. Frank Watson Dyson, M.A., Mr. Arthur John Evans, M.A., Professor John Walter Gregory, D.Sc., Captain Henry Bradwardine Jackson, R.N., Mr. Hector Munro Macdonald, M.A., Mr. James Mansergh, M.Inst.C.E., Professor Charles James Martin, M.B., Major Roland Ross, M.R.C.S., Professor William Schlich, Ph.D., C.I.E., Professor Arthur Smithells, B.Sc., Mr. Michael Rodgers Oldfield Thomas, F.Z.S., Mr. William Watson, B.Sc., Mr. William Cecil Dampier Whetham, M.A. and Mr. Arthur Smith Woodward, F.G.S.

AT the annual meeting of the American Academy of Arts and Sciences, held May 8th, the following elections took place: *Associate*

Fellows, T. C. Chamberlin, of Chicago, and John Fritz, of Bethlehem Pa.; *Foreign Honorary Fellows*, A. Celli, of Rome; A. Engler, of Berlin; F. von Richthofen, of Berlin, and G. Paris, of Paris.

At a meeting held at Cambridge University on April 27th to make some acknowledgment of Professor G. D. Liveing's services to science it was resolved:

That as a mark of our personal regard for Professor Liveing and in recognition of his valuable services to science and to the University, town and county, a testimonial be presented to him, and that it consist of a portrait of him to be painted by an artist selected by a committee in conjunction with Professor Liveing; the destination of the portrait to be determined by the subscribers.

At a meeting of the New York Academy of Sciences held on May 6th, Professor Franz von Leydig, of Würzburg, was elected an honorary member of the Academy. The Academy adopted also the following resolution, to be presented to Professor Leydig on the occasion of his eightieth birthday, on May 21st: "The New York Academy of Sciences extends to Professor Franz von Leydig many hearty congratulations on the occasion of his eightieth birthday. In offering to Professor Leydig an election to honorary membership, the members of this Academy desire to express their appreciation of his long-continued services to science, and of the profound and lasting influence that his memorable researches have exerted on the progress of zoology. With all best wishes they send him a cordial greeting from America."

MR. CHARLES HAWKSLEY has been elected President of the Institute of Civil Engineers, London. The council has made the following awards for papers read and discussed before the institution during the past session: A George Stephenson medal and a Telford premium to Mr. Harry E. Jones; Telford medals and premiums to Mr. G. A. Hobson and Mr. E. Wragge; a Watt medal and a Telford premium to Mr. Joseph Husband; Telford premiums to Mr. J. T. Ford, Mr. L. L. Buck, Mr. W. H. Stanger, Mr. B. Blount and Mr. W. J. Doak; Crampton prize to Mr. E. Sandeman.

KING EDWARD VII. has consented to become patron of the Royal Geographical Society and

to continue the royal premium of two previous reigns for the promotion of geographical research, which takes the form of the two royal medals awarded annually. The Society itself has resolved to found a Victoria medal, to be awarded occasionally for research in scientific geography.

DR. REINHARD SÜRING has been appointed chief of division, and Dr. Johannes Edler aid, in the Meteorological Institute at Berlin.

DR. WILLIAM COLLINGSBRIDGE has been appointed medical officer of health for the City of London.

DR. ADOLPH MEYER will represent Clark University at the celebration of the 450th foundation of the University of Glasgow. Dr. Meyer is at present abroad, working in Germany and Switzerland.

PROFESSOR R. S. TARR, of Cornell University, will spend the summer vacation in Switzerland.

MR. T. NELSON DALE, geologist of the U. S. Geological Survey, who recently resigned his position as instructor in geology and botany at Williams College, will make his home, in September, at Pittsfield, Mass., and from that point continue his geological field work in eastern New York State and western Vermont.

DR. JUDSON SYKES BURY will deliver the Bradshaw lecture before the Royal College of Physicians in London, his subject being 'Prognosis in relation to disease of the nervous system.'

DR. IRVING COLLINS ROSSE, the author of various works on medicine and travel, died at Washington, on May 3d, at the age of forty-two years. Dr. Rosse was at one time professor of nervous and mental diseases in Georgetown University, and, in addition to his medical work, had taken part in several Arctic expeditions.

It is announced that the Rev. James Chalmers, known for his anthropological observations in New Guinea, has been murdered by the natives.

DR. JOHN CAVAFY, formerly lecturer on physiology, demonstrator in histology and physician at St. George's Hospital, London,

has died at Brighton at the age of about sixty years. He was the author of numerous contributions to the medical journals.

MR. ANDREW CARNEGIE, who recently gave £6,500 to the British Institute of Mining Engineers for the encouragement of research, has now doubled this sum.

A TELEGRAM was received at the Harvard College Observatory on May 7th from Professor Kreutz at Kiel Observatory, stating that the south comet will appear in the Northern Hemisphere. It was observed at the Cape of Good Hope May 3^d.2115 Greenwich Mean Time in R.A. 3^h 40^m 32^s.4 and Dec. — 0° 31' 49'' and was also observed May 4^d.2187 Greenwich Mean Time in R.A. 3^h 54^m 29^s.2 and Dec. — 0° 18' 27''. The physical appearance is as follows: circular, less than 1' diameter, brighter than 3d magnitude, well-defined nucleus, tail longer than 2°.

THE Society for the Promotion of Engineering Education will hold its ninth annual meeting at Buffalo, beginning on June 29th.

A CABLEGRAM to the *New York Times* states that at a meeting of the Royal Society last week a plan was considered to enlarge the scope of the Society, so that it should embrace literature, and the other subjects included in the five academies of the Institute of France. It is said, however, that no action was taken.

WE learn from the *Northwestern Daily Mail* of April 22d (Barrow-in-Furness, Lancashire, England) that an urn of ancient workmanship has been discovered below the upper Boulder Clay, in the Isle of Walney, near Barrow. The urn lay ten feet below the surface and some forty feet above sea-level in coarse sand on a pan of sandstone beneath the clay. The excavation was for brickworks, the manager of which is confident that the rock had not previously been disturbed. The urn is eight inches in diameter, with a wall average one-fourth inch in thickness composed of at least four layers of a very fine paste of a brown tint and exceedingly hard; its outer surface is smooth and unornamented. This important find is being further investigated by Mr. Harper Gaythorpe of Barrow-in-Furness.

It is stated in the *Times* that experiments were carried out in London on May 1st by a

party of balloonists under the direction of Mr. Percival Spencer, with the object of testing the general direction of the atmospheric currents across London and of investigating the phenomena of sound in the higher reaches of the atmosphere. Four balloons ascended from the Crystal Palace, St. Anne's-grounds, Barnes, the Welsh Harp, at Hendon, and the West Ham Gas Works. The balloon from the Crystal Palace, which ascended at 4:04 p. m., reached Dorking at 5:55. The balloon which left West Ham at 4 p. m. descended at Headley, near Epsom. The greatest altitude attained was 5,500 ft. Snow was encountered above the height of a mile.

THE annual meeting of the members of the Royal Institution was held in London on May 1st, Sir James Crichton-Browne, the treasurer, being in the chair. The annual report of the committee of visitors, testifying to the continued prosperity and efficient management of the Institution, was read and adopted, as was also the report of the Davy-Faraday Research Laboratory. Forty-seven new members were elected last year, and 63 lectures with 19 evening discourses were delivered. The following were elected as officers for 1901-1902: President, the Duke of Northumberland; Treasurer Sir James Crichton-Browne; Secretary, Sir William Crookes; Managers, Sir Frederick Abel, Sir William de W. Abney, Sir James Blyth, Sir Frederick Bramwell, Dr. Thomas Buzzard, Viscount Gort, Dr. Donald Hood, Lord Kelvin, Sir Francis Laking, Mr. Hugh Leonard, Dr. Frank McClean, Mr. James Mansergh, Mr. George Matthey, Mr. W. H. Spottiswoode, and Lord Justice Stirling; visitors, Sir Andrew Noel Agnew, Dr. C. E. Beevor, Mr. W. H. Bennett, Dr. Francis Elgar, Mr. Joseph G. Gordon, Dr. J. Dundas Grant, Lord Greenock, Mr. Maures Horner, Mr. H. F. Makins, Sir Thomas Sanderson, Mr. W. S. Squire, Mr. Harold Swithinbank, Mr. J. J. Vezey, Mr. Roger W. Wallace and Mr. James Wimshurst.

At the meeting of the Council of the Royal Geographical Society, on April 28th, the Royal medals and other awards were made as follows: The founders' medal to the Duke of

the Abruzzi. The Duke undertook, at his own expense, in 1897, an expedition to Mount St. Elias in northwest America, which he for the first time ascended to its summit, 18,060 feet above sea level (July 31, 1897). In 1898 he organized, again at his own expense, an expedition towards the North Pole by the Franz Josef Land route. The expedition made a successful voyage to Franz Josef Land, where winter quarters were established. During the winter the Duke organized a sledge expedition to the north, and, being incapacitated by frost-bite from leading it in person, entrusted the command to Captain Cagni, who succeeded in reaching the highest latitude yet attained by man— $86^{\circ} 33'$ or $22'$ beyond Nansen's furthest. By this journey over the frozen ocean Captain Cagni disproved the existence of the land shown on the maps to the north of Franz Josef Land, the northern parts of which were for the first time accurately surveyed. The scientific work of the expedition included determinations of positions by astronomical observations, observations of the state and distribution of the ice, investigation of the meteorological and tidal phenomena, the aurora borealis, gravity, and the geology of the lands visited. The patrons' medal was awarded to Dr. A. Donaldson Smith, who in 1894 organized at his own expense an expedition for purposes of exploration between Shebel river and Lake Rudolf, which had at that time never been reached from the north. Starting from Berbera in July, 1894, he pushed southeast to the headwaters of the Shebel, on which he threw much new light, made a wide circuit to the south, crossing the Jub, and making his way westward to Lakes Stefanie and Rudolf. He explored the lower course of the Omo, skirted the east shores of Lake Rudolf and, striking southeast through hitherto unknown districts to the Tana river, reached the east coast, having thus traversed the whole extent of the Somali and Galla countries from north to south. In 1898 he organized a new African expedition for the purpose of completing his former work. Leaving Berbera in August, 1888, he again reached the north end of Lake Rudolf, making *en route* considerable rectifications of the map; and, con-

tinuing his march westward, crossed for the first time the unknown tract of country lying between Lake Rudolf and the Upper Nile. Throughout his journey he executed a careful route survey, carrying a triangulation through from Somaliland to the vicinity of the Nile, and supporting this by frequent astronomical observations with theodolite and chronometers. The other awards were made to Mr. Louis Bernacchi and Captain Colbech for their aid in the Southern Cross Antarctic expedition, and to Captain Cagni for his journey to $86^{\circ} 33' N.$, on the Duke of the Abruzzi's expedition.

PROFESSOR WILLIAM RAMSAY has issued a report on the subject of the proposed institute for post-graduate education, which a wealthy Parsee, Mr. Tata, recently offered to endow. This report, according to the London *Times*, states that the institute should be placed with reference to the situation of raw products; its site should be where the climate admits of energetic work during most of the year; and it should, if possible, be near a coalfield or some source of electric power. Bangalore is selected as an ideal site; for the Mysore State is rich in minerals (iron, gold, magnesite, manganese ore, corundum, &c.), and sugar-cane and the poppy are cultivated there. The climate is temperate, the place is easily accessible, and the Cauvery Falls can provide enough power for many factories. The Mysore Government have offered land for the institute, and would probably aid the scheme with pecuniary support in recognition of the benefits which would accrue to the State from its operations. Professor Ramsay discusses the salaries, period of office, vacations, duties and restrictions of members of the staff, and the method of appointment to chairs. He suggests that mechanics should be engaged to make apparatus and to teach the students to use their hands. A mechanic in brass and iron and a glass-blower might be procured who could train native boys to become skilled workmen capable of constructing apparatus and machinery as the work of the institute increases. Students should be selected from Indian colleges and should be graduates in science, except those who come from engineering colleges. The students would

accumulate at the rate of 15 to 20 a year, and the total number in the institute would not exceed 60, an ample number for a staff of nine teachers in research work. In order that the scheme may be set on foot, Mr. Tata's generous benefaction needs a supplement of about £5,000 from the Government of India. As the Viceroy and several members of his Council have promised favorable consideration, it may be hoped that this modest grant will be forthcoming. "I can imagine few ways," says Professor Ramsay, "in which a contribution from the State is likely to have such substantial and far-reaching results on the prosperity of the whole people. For the establishment of industries would result not merely in giving employment to the small number of experts for whom this Institute is designed, but to a vast army of clerks, artisans, workman and also merchants, whose object would be the disposal of the manufactured articles produced from the raw materials existing in the country; whereas, by exporting the raw materials as such, the country is impoverished, for their extraction gives employment only to navvies and to the railway companies."

UNIVERSITY AND EDUCATIONAL NEWS.

THE Legislature of Minnesota has recently appropriated \$25,000 for a new laboratory of agricultural chemistry, and \$25,000 for the erection and equipment of a building for instruction in, and investigation of, veterinary science.

PHILLIPS ACADEMY, of Andover, Mass., has established a department of archeology with a fund of \$150,000. A museum is about to be erected. Dr. Charles Peabody, of Harvard, is hon. director, and Mr. W. K. Moorehead is curator. There are about 40,000 specimens with which to begin study. They were collected during the past six years by Mr. Moorehead for the founder, whose name, at his own request, is withheld from publication.

MR. H. M. HANNA has given to Western Reserve University \$12,000 to establish a research fellowship in its medical school in the departments of physiology and pathology.

THE alumni of Columbia University are making efforts to collect \$400,000 for a hall for the college. It is hoped that the building may be erected by the time of the celebration of the hundred and fiftieth anniversary of the founding of the University in 1904.

EFFORTS are now being made to promote the better equipment of Queen's College, Belfast. It appears that the chair of pathology has been endowed and that a laboratory of physics and engineering has been promised by Mr. Pirrie. The sum of £5,000 has been given by Sir James Musgrave.

GROUND has been broken for the new Administration and Science Building of Colorado College. The sum of \$160,000 has been secured for its erection and equipment, of which sum Dr. Pearsons, of Chicago, and Mr. W. S. Stratton have each contributed \$50,000. The building will contain laboratories in all departments of science, lecture and recitation rooms, and a large natural history and geological museum.

THE Kent Laboratory of Chemistry at Yale University is now being enlarged in accordance with the bequest of \$50,000 by A. E. Kent.

THE courts have decided that the Loomis laboratory must be relinquished by New York University. It would in this case go to the Cornell University Medical College, but we understand that the litigation will be continued.

AT the conference of the Presidents of the State Universities held at the University of Illinois, on May 1st, 2d and 3d, the following subjects were brought up for discussion:

1. What can be done to stimulate publication among university teachers and graduate students without over-stimulating it?
2. Is a uniformity of system in keeping the records and making the reports of State universities desirable and practicable?
3. How does one get rid of a professor who is industrious and attentive to his duties, who has good sense, whose influence upon students is good, but who by lack of ability and training is paralyzing the instruction of his department?
4. Should entrance requirements for colleges of agriculture be lower than for other colleges? What technical courses might be offered in agriculture without entrance conditions?