

of the meeting. You can obtain your ticket not earlier than June 25, nor later than June 30. Be sure when purchasing your going ticket you request a *certificate*, and do not make the mistake of asking for a *receipt*. On your arrival at the meeting present your certificate to R. S. Clifton, assistant secretary, general registration office, Goldwin Smith Hall, Cornell University. A special agent of the Trunk Line Association will be in attendance to validate certificates on June 30 and July 2. A fee of twenty-five cents will be collected for each certificate validated. If you arrive at the meeting and leave for home prior to the special agent's arrival, or if you arrive later than July 2, you can not have your certificate validated and will not get the benefit of the reduction. No refund of fare will be made on account of failure to have certificate validated. It must be understood that the reduction on the return journey is not guaranteed, but is contingent on an attendance of not less than one hundred persons holding certificates showing payment of full first-class fare of not less than 75 cents. If the necessary minimum is in attendance and your certificate is duly validated, you will be entitled up to July 6 to a continuous passage ticket to your destination by the route over which you make the going journey at one third the limited fare.

LOCAL COMMITTEE.

The officers are:

Honorary Presidents: Jacob Gould Schurman, Andrew Dickson White.

Chairman: Edward L. Nichols.

Secretary: Willard W. Rowlee.

Committee on Hotels and Accommodations: Abram W. Kerr.

Committee on Excursions: George F. Atkinson.

Committee on Transportation: Rolla C. Carpenter.

Committee on Finance: Henry S. Williams.

Committee on Places of Meeting: Frederick Bedell.

Committee on Entertainment of Visiting Ladies: Anna B. Comstock.

SCIENTIFIC NOTES AND NEWS.

DR. L. A. BAUER has accepted the permanent directorship of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington. Since the formation of this department on April 1, 1904, he has directed its work in addition to the duties devolving upon him as in charge of the magnetic survey and observatory work of the United States under the auspices of the Coast and Geodetic Survey. However, as soon as conditions will permit, after July 1, he will relinquish the charge of the latter work and devote his entire time to the magnetic work of the Carnegie Institution, which has been expanded so that a general magnetic survey of the globe is contemplated.

PROFESSOR W. H. WELCH, of the Johns Hopkins University, and Professor Nicholas Senn, of the University of Chicago, have been elected honorary members of the Imperial Medical Society of Vienna. Professor J. J. Abel, of the Johns Hopkins University; Dr. John C. Hemmeter, of the University of Maryland; Professor C. A. Herter, of Columbia University; Dr. Graham Lusk, of the University and Bellevue Hospital Medical College; Professor L. Emmett Holt, of Columbia University, and Professor Jacques Loeb, of the University of California, were elected corresponding members.

MCGILL UNIVERSITY will confer its doctorate of laws on Dr. Donald Macalister, Linacre lecturer of physics at Cambridge and president of the General Medical Council.

THE honorary degree of doctor of civil law has been conferred at a special convocation of Durham University on Baron Takaki, the Japanese surgeon-general.

THE French government has appointed a commission on agricultural hygiene, with Dr. Bruardel as president.

PROFESSOR A. E. KENNELLY, of Harvard University, has been appointed by the American Institute of Electrical Engineers as a delegate to the International Commission for the standardization of nomenclature and ratings of electrical machinery to meet this summer in London.

SIR ALEXANDER B. W. KENNEDY has been elected president of the British Institution of Civil Engineers. The council of the institution has made the following awards for papers read and discussed during the past session: A Telford gold medal to Mr. J. A. Saner, a Watt gold medal to Mr. G. G. Stoney and a George Stephenson gold medal to Dr. I. E. Stanton; Telford premiums to Mr. Leonard Bairstow, Mr. H. S. Bidwell, Mr. J. J. Webster, Mr. Cathcart W. Methven, Mr. H. A. Mavor, Sir Frederick R. Oppcott; and a Manby premium to Mr. D. E. Lloyd-Davies.

DR. BRADLEY M. DAVIS has been spending the spring in Cambridge, completing a textbook of botany in co-authorship with Mr. Joseph Y. Bergen. His connection with the University of Chicago will end on July 1. He will be at Woods Hole through the summer.

DR. W. C. FARABEE, of the anthropological department at Harvard University, with three students, will next year conduct a research expedition about the headwaters of the Amazon. For a time a base will be established at Arequipa, Peru. The party will be gone three years.

DR. HENRY S. PRITCHETT, president of the Carnegie Foundation, will give the commencement address at the Rhode Island College on June 12, his subject being 'The Essentials of Good Administration.'

At the recent meeting of Phi Beta Kappa at the University of Wisconsin, Dr. William Trelease, director of the Missouri Botanical Garden, made the address.

PROFESSOR W. J. SOLLAS began on May 24 a course of three lectures at the Royal Institution on 'Man and the Glacial Period.' The Friday evening discourse on May 25 was delivered by Mr. Leonard Hill, on 'Compressed Air and its Physiological Effects.'

PREPARATIONS have been made for celebrating on May 15 the fiftieth anniversary of the entrance on his life's work as teacher of zoology of Professor Eugene Renevier, of the University of Lausanne, whose death we were compelled to report last week.

THE trustees of the American Science and Historic Preservation Society have recently presented to congress a memorial in which they ask that a monument be erected at some place near the Grand Canyon of Colorado River to Major John Wesley Powell and his companions in the exploration of the canyon in 1869.

THE death is announced of Dr. Darwin D. Eads, who had practised medicine for forty years at Paris, Ky., and had made valuable botanical collections in the central states; and of Francis Louis Sperry, a mining engineer and mineralogist.

DR. WILHELM MEYERHOFER, docent in chemistry in the University of Berlin, died on April 21; Dr. K. Pape, formerly professor of physics at the University of Königsberg, has died at the age of seventy years; and Dr. Ernst Schellwien, adjunct professor of geology and paleontology at Königsberg, has died at the age of forty years.

It is a matter of considerable interest to scientific men that the Postal Union Congress which met recently at Rome has increased the weight of foreign letters requiring five cents postage from 15 to 20 grams. The reduction will be still greater for us, as the limit will be made one ounce. The cost for each further ounce will be reduced to three cents. The proposal has also been made to reduce the letter rate between Great Britain and the United States to two cents. This would not require further action by the union, and may be carried into effect by negotiations between the two countries.

MR. GEORGE EASTMAN, of Rochester, N. Y., has subscribed one thousand dollars annually for the next three years to enable the continuance of research work in photography at the Yerkes Observatory of the University of Chicago. The investigations will be carried on by Mr. R. James Wallace, photophysicist at the observatory.

THE College of Charleston Museum has acquired the valuable conchological collection of the late Dr. Edmund Ravenel, of Charleston,

which contains some 3,500 species of land, fresh water and marine shells.

THE Danish Arctic Biologic Station will be open for investigators for the first time during the summer of 1907. Application for a table should be sent to the Danish ministry of education (Kultusministerium), through the consulate of the United States, Copenhagen, Denmark.

THE astronomical observatory of La Plata has been affiliated with the new National University of La Plata, recently inaugurated by the minister of public instruction of the Argentine Republic.

It is announced that the issue of the *Index Medicus*, published by the Carnegie Institution, has been unavoidably delayed, owing to the recent printers' strikes. For this reason, the number for March has not as yet been published. On account of the strike the general index of the *Geologist* has also been delayed and will not appear until some time in June.

THE German Zoological Society and the German Botanical Society are meeting this year at Marburg, beginning on June 5.

THE Reale Istituto Veneto di Science, Lettere ed Arti has decided to commence a systematic scientific study of the geophysical phenomena which concern directly and indirectly the lagoon of Venice. With this object a special committee has been appointed, and the preliminary investigations, bearing principally on the tidal waves in the upper Adriatic and the rivers flowing into it and into the lagoon of Venice, have been intrusted to Dr. Giovanni Piero Magrini, who is to be assisted by Professors Luigi de Marchi and Tullio Gnesotto of the University of Padua.

THE Paris correspondent of the London *Times* reports that at a meeting of the Academy of Medicine on May 16, Professor Metchnikoff supplemented his previous statement as to his prophylactic treatment of syphilis by important observations concerning some objections made against his method by Professor Neisser, of Breslau. Dr. Metchnikoff

and Dr. Roux discovered by a number of experiments that infection by inoculation of the syphilitic virus in monkeys and men was arrested and nullified by application of the calomel ointment within an hour of the introduction of the virus. Professor Neisser, experimenting with Java monkeys, obtained by the same method results that were less satisfactory. He had only one hundred successful cases out of two hundred. Dr. Metchnikoff gave an explanation of this fact. Professor Neisser, he affirms, makes his scarifications too deep, by which method he completely alters the conditions of the experiment. In the majority of cases of normal syphilitic infection the virus penetrates by purely epidermic—that is to say very superficial—erosion. If it be artificially introduced into the lower tissues, the absorption takes place in less than an hour and the prophylactic treatment arrives necessarily too late. Dr. Roux and Dr. Metchnikoff, while practising scarifications certainly deeper than those which give rise to syphilitic infection in life, carefully avoided applying the virus too far below the surface.

WE learn from *Nature* that the Republic of Uruguay has recently established a National Institute for Weather Prediction, with its central observatory at Monte Video; the meteorological observatory at that place was founded by the municipal authorities in 1895. Observations have been made at several stations for some years, and the new institution has commenced its operations by the collation and discussion of the means and extremes already available, and by the investigation of the characteristics of the severe storms which affect the navigation of the estuary of the Rio de La Plata. The most dangerous storms are those from the southeast, as they usually occur with a rising barometer, in connection with anticyclonic conditions over the Atlantic, and are frequently accompanied by thick fog on the coast. The first number of the bulletin of the institute contains an exposition of the hydrography of the estuary, and tables showing, *inter alia*, the effect of the various winds upon the tides of the river.

WE learn from the London *Times* that the senate of the University of London has invited representatives of the University of Paris and of the Collège de France to visit London. These representatives will be accompanied by the highest officials of the French Ministry of Public Instruction, and by a number of representatives of the French provincial universities. The Société des Professeurs de Langues Vivantes and of the Guilde Internationale will be simultaneously entertained by the Modern Language Association, and the university has arranged for the representation of all these bodies at the various ceremonies. The French delegations will be headed by M. Liard, the vice-rector of the University of Paris. The king has expressed his desire to receive a number of the French visitors at Windsor on Thursday afternoon, June 7. The general program includes the following: Monday, June 4, an informal dinner at the Royal Palace Hotel, Kensington, where the guests of the university will stay. Tuesday, June 5, a reception at the foreign office by Lord Fitzmaurice and Mr. Lough, M.P., parliamentary secretary of the board of education, at noon; luncheon at the university; addresses at the university by the vice-chancellor, M. Liard, Sir Arthur Rücker and Professor Sadler. Wednesday, June 6, visits to Westminster Abbey, to Westminster School and to some of the London County Council educational institutions, followed by a luncheon to be given by Mr. Evan Spicer, chairman of the County Council, at Belair, Dulwich; in the evening, a dinner at University College and various private dinners, followed by a reception by the French ambassador at the French embassy. Thursday, June 7, addresses by the deans of the Faculties of Arts and Science of the Universities of London and Paris, by Professor Sir William Ramsay and by representatives of the Collège de France, the French provincial universities and the French Modern Language Association; in the evening a *conversazione* at the university. A number of the French guests will, on Friday, June 8, visit the Universities of Oxford and Cambridge.

THE *Journal of the American Medical Association* reports that it is the purpose of Health Commissioner Dr. Dixon to destroy the breeding places of mosquitoes in Pennsylvania. The task will involve the examination of all places holding or capable of holding water in which the species can breed. Dr. Dixon has employed an expert entomologist to take up the work and map out all the malarial districts in the state. The report of the entomologist will give all conditions supplying the environment necessary to support the lives of the variety of mosquito which carry the poison from one person to another. That this work shall prove most economic, it is proposed that the country surrounding the larger centers of population be investigated and the most dangerous pools and streams be mapped out, starting with the built-up municipalities in the southern part of the state, where malaria is most prevalent. For the purpose of mapping the breeding places it is proposed that the United States Geological Survey maps be used.

THE following letter, dated May 1, has been sent by the post-office to the Decimal Association: "With reference to your further letters of April 11 and 27, concerning the treatment of letters for places abroad prepaid a single rate of postage and weighing more than half an ounce, but not more than 15 grams, I am directed by the postmaster-general to acquaint you that such letters for any foreign country included in the postal union are sent forward for delivery uncharged. The same treatment would be applied to any letter weighing more than 15 grams which might happen to be posted with 5d. prepaid on it, and so on for other weights. I am, Sir, your obedient servant, H. Buxton Forman." In forwarding a copy of this letter to the London *Times* the Decimal Association adds: "The metric weights and measures have, according to this communication, been adopted by the post-office for foreign letters, and it is difficult to understand how the representative of the British post-office at the Postal Congress in Rome, could have stated there that 'under

no condition would Great Britain adopt the metric system.' ”

A MAP representing parts of California and Mexico has recently been published by the United States Geological Survey which is of unusual interest at this time. The area covered is widely known as the Salton Sink, a great depression in the Colorado Desert which has been much discussed lately, owing to the threatened formation of a large inland sea where there is now a thriving community. About 8,000 people have settled in that part of the basin known as the Imperial Valley and are raising excellent crops of barley and alfalfa. Stock farms are numerous and experiments in raising the date palm are in progress. The freight shipments from Imperial, a town only four years old, rival those of Los Angeles in value, and are said to exceed those of any other town in southern California. The existence of this peaceful community is however seriously endangered by Colorado River which strangely enough is also the source of all its prosperity as it is this stream which furnishes water for the irrigation system. The absence of any controlling works at the head of the main canal has resulted in diverting the river from its old channel and permitting the entire flood flow to enter the irrigation system. This is causing great damage to the ditches and crops, and is forming a large lake, which now covers about 250 square miles, at the lowest part of the sink. The Southern Pacific Railroad has been obliged to rebuild many miles of tracks. The map of this region, which is called the Salton Sink special, shows on a scale of about eight miles to an inch, all the principal towns, roads, canals and drainage lines. Contour lines also indicate what the future sea may cover at different altitudes. The usual price of five cents a copy will be charged for this map, which was made by Mr. W. Carvel Hall, under the direction of Mr. R. B. Marshall.

A REPORT from Consul-General George W. Roosevelt describes a series of experiments arranged by the meteorologic service of Belgium to be made with balloons for the purpose

of determining the pressure of the atmosphere and the temperature and moisture of the air. In the subjoined report Consul-General Roosevelt furnishes the result of the first experiment. The trial was made at 7:21 A.M., April 5, with two balloons coupled together measuring respectively 1.90 meters and 1.35 meters in diameter. The balloons rapidly ascended, quickly attained a very high altitude, and disappeared in a south-southeast direction. About 10 A.M. they descended at Wancennes, a village some 113 kilometers from Brussels. The altitude was about 15,000 meters, where the atmospheric pressure as registered by an aneroid barometer was only 86 millimeters. During the trial the velocity of the wind on land registered 2 meters per second and 10 meters in the upper air. The culminating point of ascension was reached between 8:20 and 8:26 A.M., but the lowest temperature (-57.4°) was registered a little later, at 8:37 A.M., by 110 millimeters, barometric pressure. The balloons passed through the same zone of intense cold at 8:09 A.M. Temperature, -56° ; pressure, 104 millimeters. When the balloons were sent up the relative degree of atmospheric humidity was 80 per cent., but rapidly diminished, and at 9:13 A.M. descended to 32 per cent. Small balloons sent up simultaneously with the two sounding balloons took a direct easterly direction, one going as far as Duren, Germany, a small town situated between Aix-la-Chapelle and Cologne, about 193 kilometers from Brussels.

THE London *Times* says: “Through the courtesy of the president of the Iron and Steel Institute (Mr. R. A. Hadfield) we are enabled to refer to some of the arrangements which have been made for the reception of the American Society of Engineers on their visit to this country in July. The executive committee of the Iron and Steel Institute, among whom are to be numbered the president, Sir James Kitson, Mr. Andrew Carnegie and Sir Hugh Bell, may be trusted to show a due appreciation of the very high altitudes attained by American hospitality and a determination that nothing shall be wanting in a proper emulation of the exertions which

have been displayed by our neighbors in the entertainment of guests from this country. The members of the Iron and Steel Institute have on two occasions been entertained by their *confrères* on the other side of the Atlantic. The 200 members or so who went to the United States, the expedition being headed in the first instance by Sir James Kitson and in the second by Mr. Carnegie, found the pleasures spread for their delectation so profuse, and every one possessed with so consuming a desire to afford them entertainment, that they had little leisure for the calm and collected examination of those productive resources in the American iron and steel industry the inspection of which were the ostensible purpose of the journey. The American Society of Engineers are assured of the heartiest welcome in this country. We can not hope to emulate their hospitality on the scale upon which it was extended to the members of the Iron and Steel Institute; for a tour of 12,000 miles within the area of our shores is impossible unless it were conducted in a circular direction. But in spirit we can fairly vie with our American colleagues, and the heartiness of our welcome to them will not be inferior to that given by them to our own countrymen."

UNIVERSITY AND EDUCATIONAL NEWS.

It is announced that Mr. David Rankin, of St. Louis, has decided to give \$2,000,000 to found an industrial and manual training school in St. Louis.

THE college of agriculture of the University of Wisconsin, the attendance of which has increased very greatly during the past two years, is to receive two important additions in the form of an agronomy building and agricultural engineering building. The plans for both structures have just been completed, and the contracts, which are about to be made, provide for their completion before the beginning of the short course in agriculture next winter.

At the commencement exercises of the University of Nevada, May 31, 1906, President Stubbs announced that Mr. Clarence H.

Mackay and his mother, Mrs. John W. Mackay, have together given \$50,000 for the immediate erection of a building for the College of Mines. This building is to house the department of mining and metallurgy and that of geology and mineralogy and has been planned according to the recommendations of the heads of these departments. A recent state appropriation for the metallurgical laboratory has provided the university with a new ore-treating equipment which will be suitable for installing in the new quarters. The building will also contain a geological museum. Furthermore, Mr. F. M. Smith has arranged to provide an income of \$1,000 a year to be used for the support and encouragement of students in the Mining School. This will in general be divided into five annual scholarships of \$200 each to be known as the F. M. Smith scholarships open to deserving students irrespective of citizenship or residence.

THE preliminaries for the establishment of a Hindu University are making progress. Offers of service are coming in from the principals and professors of the leading colleges of India, and the Munshi Madho Lal, who gave \$100,000 to the endowment, has been conferring on the details of the foundation. A deputation will be sent to collect subscriptions throughout India.

Nature states that steps are being taken for the provision of a permanent endowment to place the Balfour library in a secure position. The library owes its origin to the generosity of the family of the late Professor F. M. Balfour, who after his death in 1882 presented his scientific books to Cambridge University for the use of the zoological laboratory. The library so constituted was housed in a room adjacent to the laboratory, and has ever since been freely open to all members of the university and to others qualified to make use of it. The library has been maintained hitherto out of the fees paid by students attending the classes; and the burden which it thus places upon the resources of the laboratory is undesirable. A committee has, therefore, been formed for the purpose of collecting subscrip-