

no plans were formulated for so pretentious an undertaking. Based upon this world map, it is proposed also to prepare an international aeronautical map of the world on scale of 1:200,000, and an official conference to determine the details is to be convened.

The delegates voted in approval of the proposition that the most important problems to be settled in connection with the international exploration of the north Atlantic Ocean relate to the size, the regional extent and the nature of periodic variations of water layers to the depth of 1,000 meters, and it was recommended to continue systematic observations upon ocean currents and upon the temperature and salinity near the surface of the sea.

The proposition of the Danish Geographical Society was approved to invite the geographical societies of Rome, Madrid, Lisbon, Geneva, London, Berlin, Vienna, New York, Paris, St. Petersburg, Copenhagen, Brussels, Amsterdam, Christiania, Stockholm and Budapest to meet in Denmark in 1914 for the purpose of organizing a World Union of Geographical Societies. A large committee was appointed with one or more members from each country possessing ancient maps of its domain, for the *refection* of these maps, these gentlemen being charged with the preparation of a catalogue to be printed in a geographical journal before the opening of the next congress. Dr. E. L. Stevenson, of the Hispano-American Society of New York, was made the representative for Spain.

Much enthusiasm was shown in approving a proposition to organize in each country during the summer vacation periods of the higher institutions of learning, international courses of instruction in geography, in which foreign savants would be invited to take part. The plan contemplates also the founding of an International Geographical Institute, the seat of which is left for later determination, this institute to direct and coordinate the studies and all geographical initiatives which have an international character.

The difficult questions concerned with the confusing duplicate place names on international frontiers (such, for example, as the

Alps and Pyrenees) it was voted to refer to a commission with a view to securing the general use in each case of a single term, or, when this seems impracticable, terms which are in correspondence. After a warm discussion the proposal to add Spanish to the four official languages of the congress was definitely and decisively rejected. The eleventh international congress it was decided to hold in St. Petersburg in 1916, with a rather general understanding that the next succeeding congress would be convened in Vienna.

The social events included a reception at the palace of the Campidoglio and a complimentary dinner tendered to the delegates by the committee of organization. Delightful local excursions were made to Tivoli, Ostia, Terni and the Alban Hills; and after adjournment there were longer journeys to the Po Valley and Préalpes on the one hand, and upon the other to Naples (Mt. Vesuvius and the *Campi Phlegreii*), Sicily (ascent of Mt. Etna) and Tripoli.

The weather throughout the meeting was perfect and the campagna at its best in its spring garlands of flowers; but it may be questioned whether Rome is not, even without these allurements, too interesting in itself to be an ideal seat for international congresses.

WM. HERBERT HOBBS

April 15, 1913

#### SCIENTIFIC NOTES AND NEWS

PROFESSOR J. M. ALDRICH, the circumstances of whose enforced retirement from the professorship of zoology and entomology at the University of Idaho, are described by Professor Vernon L. Kellogg in this issue of SCIENCE, has accepted a position in the Bureau of Entomology, U. S. Department of Agriculture.

THE American Geographical Society has conferred its Charles P. Daly gold medal upon Dr. Alfred H. Brooks for his geological and geographical work in Alaska.

THE Georg Neumayer gold medal was bestowed upon Dr. L. A. Bauer, director of the Department of Terrestrial Magnetism of the

Carnegie Institution of Washington, on May 3, in connection with the celebration of the eighty-fifth anniversary of the Berlin Gesellschaft für Erdkunde. The medal is awarded to Dr. Bauer for his researches in terrestrial magnetism. Professor Neumayer, who founded the medal, will be recalled as the most eminent student, during his lifetime, of the earth's magnetic phenomena. The medal has not been awarded since 1906.

DR. GEORGE H. BARTON, director of the Teachers School of Science, Boston, was given a dinner and a presentation on May 9. Among those who made addresses were President MacLaurin, Professor Sedgwick and Professor Burton, of the Massachusetts Institute of Technology; Professor Woodworth and Professor Ropes, of Harvard University; Professor Fisher, of Wellesley College, and Professor Lane, of Tufts College.

DR. ROSSITER W. RAYMOND, of Brooklyn, was elected an honorary member of Alpha Chapter of Tau Beta Pi at a joint meeting of Tau Beta Pi and Phi Beta Kappa, at Lehigh University last week.

SIR DAVID GILL, formerly astronomer at the Cape of Good Hope, has received the insignia of commander of the Legion of Honor, which has been conferred on him by the president of the French Republic.

THE council of the Institution of Civil Engineers has made the following awards for papers read during the session 1912-13: A Telford gold medal to Mr. Murdoch Macdonald, C.M.G. (Cairo); a George Stephenson gold medal to Mr. G. D. Snyder (New York); a Watt gold medal to Mr. H. A. Humphrey (London); Telford premiums to Messrs. C. W. Methven (Durban), B. Hall Blyth, Jr. (Edinburgh), C. J. Crofts (Durban), Frank Grove (Canton), B. T. B. Boothby (Hankow), and Francis Carnegie (Enfield Lock), and the Manby premium to Capt. C. E. P. Sankey, R.E. (London).

PRESIDENT WILSON received on May 6 a committee of the American Medical Association, which urged a general conference to discuss plans for a federal department of public

health and matters pertaining to the conservation of human life and efficiency. Professor Irving Fisher, of Yale; Dr. John B. Murphy, of Chicago; Dr. G. H. Simmons, of Chicago; Dr. L. K. Frankle, and Dr. Abram Jacobi, of New York; Dr. Harvey M. Wiley, Senator Owen, and Representatives Foster, of Illinois, and Curley, of Massachusetts, were present.

DR. PAUL MARCHAL, chief of the Entomological Station of Paris, professor in the Agronomical Institute of France, and a member of the French Academy of Sciences, landed in New York on the fourth of the present month. He comes to America for the purpose of studying the organization of the Bureau of Entomology of the Department of Agriculture at Washington and other organizations working in applied entomology. He will remain in the United States for two or three months. Dr. Marchal is especially well known to general students of biology and morphology on account of his remarkable researches in polyembryony. In the course of his stay he will visit most parts of the United States.

DR. PEER GEIJER, the Swedish geologist, has joined the University of Wisconsin expedition to the Lake Superior mine regions. The party consists of advanced students in the engineering college and professors. The inspection tour is made every two years. Besides Dr. Geijer, J. J. O'Neill, of the Canadian Geological Survey, and G. W. Crane, of the Missouri State Geological Survey, are of the party.

PROFESSOR W. J. BAUMGARTNER, of Lawrence, Kansas, will conduct his fourth party of biologists to the Puget Sound Marine Station at Friday Harbor, Wash., this summer. A chartered car will leave St. Paul on the morning of June 14, and will go over the beautiful Canadian Pacific route, stopping to visit glaciers, etc. Six weeks will be spent on the coast studying the exceedingly rich fauna and flora under very favorable conditions.

PROFESSOR HENRY H. NORRIS, head of the department of electrical engineering at Cornell University, has resigned to join the editorial boards of *The Electric Railway Journal* and *The Electric World*, of which he has been an associate managing editor for some years.

AMONG those who spoke at the dedication of the engineering buildings on May 8 and 9, at the University of Illinois, were Mr. Samuel Insull, president of the Commonwealth Edison Company; M. J. G. Panghorn, special representative of the Baltimore and Ohio Railroad; Mr. John Hays Hammond, mining engineer, American Institute of Mining Engineers; Mr. W. L. Park, vice-president Illinois Central Railroad; Mr. Isham Randolph, consulting engineer, Chicago, and Governor Edward F. Dunne.

MRS. CHRISTINE LADD FRANKLIN, of New York City, gave last week at Columbia University and is giving this week at Harvard University three lectures on "Color Vision."

ON April 7, Dr. Haven Metcalf, of the Bureau of Plant Industry, lectured at the University of Wisconsin on "The Work of the Government in Forest Pathology."

THE Linacre lecture of Cambridge University was delivered by Dr. Norman Moore on May 6 in the lecture room of anatomy and physiology, New Museums. The title of the lecture was "The Physician in English History."

SIR J. ALFRED EWING gave a lecture on the structure of metals before the Durham Philosophical Society on May 2.

A COMMITTEE has been formed, with the king of Italy as president, to establish suitable memorials of the late Professor Giovanni Schiaparelli, the distinguished astronomer.

THE teachers of the Normal School at Avignon, of which M. J. H. Fabre, the entomologist, was a pupil, are taking steps to erect a monument in his honor. The council of Vaucluse has voted 1,500 francs to the fund.

MR. SHINOBU HIROTA, who recently returned to Japan after assisting Professor Milne for eighteen years in his work in seismology, died on April 24.

THE British government intends, as we learn from *Nature*, to ask parliament to sanction a special vote sufficient to provide as follows: For Lady Scott (in addition to the Admiralty pension of £200 per annum for herself and £25 per annum for her son, until he

reaches the age of eighteen) an annuity of £100. For Mrs. Scott, the mother, and Mrs. Campbell and Miss Grace Scott, the sisters, of Captain Scott, a joint annuity of £300. For Mrs. Wilson, the widow, and Miss Mary Souper, the sister-in-law, of Dr. E. A. Wilson, a joint annuity of £300. For Mrs. Evans, the widow of Petty Officer E. Evans (in addition to the pension and allowances awarded to her by the Admiralty, amounting to 13s. 6d. a week), a further annuity of 12s. 6d. a week for herself and 3s. a week in respect of each of her children up to the age of eighteen. The government of India, in the service of which Lieutenant Bowers was before joining the expedition, has offered to provide pensions, amounting in all to £100 per annum, for his mother and sisters. Captain Oates, the fifth member of Captain Scott's southern party, was unmarried; and as no mention is made of any relatives, it may be assumed that he was possessed of ample means. In addition to the provision referred to, the total amount subscribed by the public as a memorial for the dead explorers and kindred purposes is £55,760.

THE surgeon general of the army announces that preliminary examinations for appointment of first lieutenants in the army medical corps will be held on July 14, 1913, at points to be hereafter designated. Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to secure an invitation are that the applicant shall be a citizen of the United States, shall be between 22 and 30 years of age, a graduate of a medical school legally authorized to confer the degree of doctor of medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training as an interne, after graduation. The examinations will be held simultaneously throughout the country at points where boards can be convened. Due consideration will be given to localities from which applications are received, in order to lessen the traveling expenses of applicants as much as possible. In order to perfect all necessary arrangements for the examination,

applications must be completed and in possession of the adjutant general at least three weeks before the date of examination. Early attention is therefore enjoined upon all intending applicants. There are at present forty vacancies in the medical corps of the army.

THE International Association of Medical Psychology and Psychotherapy will hold its annual meeting at Vienna on September 18 and 19, immediately before the opening of the Congress of German Men of Science and Physicians.

MINING students of the University of Illinois will hold a mining exhibit in connection with the dedication of the Mining Laboratory on May 8, 9 and 10. This will consist of a display and demonstration of the heavy mining machinery and apparatus of the new building.

THROUGH the cooperation of the Bermuda Natural History Society and Harvard University, the Bermuda Biological Station for Research will be open this summer as usual for about six weeks, from the middle of June till August. Botanists or zoologists wishing to avail themselves of this opportunity should communicate with Dr. E. L. Mark, 109 Irving St., Cambridge, Mass.

DURING the months of July and August the facilities of the Seed Laboratory of the Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C., will be available as far as space permits to any one who wishes to consult the seed collection and become familiar with the practical methods of seed testing for mechanical purity and germination. For further information address Mr. E. Brown, botanist in charge.

SECRETARY DANIELS has withdrawn the offer of warships for the use of college students because of the new plans for the Atlantic fleet. Sending the fleet through the Mediterranean will make it necessary to use some of the ships, now in reserve, for various details. Consequently there will be none left that will be available for the use of college men.

At the recent annual meeting of the Naples Table Association for Promoting Laboratory Research by Women, the use of the table supported by the association at the Zoological Station at Naples was granted for the coming year to Dr. Rhoda Erdmann, of Berlin, Germany, and Dr. Caroline Thompson, professor of botany at Wellesley College. The Ellen Richards research prize of \$1,000 for the best thesis written by a woman on a scientific subject embodying new observations and new conclusions based on independent laboratory research in biological, chemical or physical science, was awarded to Miss Ida Smedley, London, England, D.Sc., London University, who has been working for the past four years in the biochemical laboratory of the Lister Institute of Preventive Medicine. The subject of the winning thesis was: "An Investigation into the Methods of Formation of Fatty Acids from Carbohydrates in the Organism." Ten theses were submitted in competition. The examiners for the award of this prize were: Dr. W. H. Howell, Johns Hopkins Medical School; Dr. Theodore Richards, of Harvard University, and Dr. Henry Crew, of Northwestern University. The following officers were elected:

*President*, 1913-14—Miss Ellen F. Pendleton, president of Wellesley College.

*Treasurer*, 1913-14—Mrs. Elizabeth L. Clarke, a trustee of Smith College.

*Secretary*, 1913-16—Mrs. Ada Wing Mead, of Providence.

THE Utah Eugenics Society met on April 3, for permanent organization, having existed under temporary organization since May 20, 1912. The committee on permanent organization reported constitution, by-laws, and recommendations to the meeting and nominations for officers. After a short program, consisting of talks on various phases of eugenics by Mr. Mathohniah Thomas, Professor E. C. Gibbs, of Salt Lake High School, Mrs. Martha C. Jennings, matron of women, Salt Lake City High School, Dr. E. D. Ball, of the Agricultural College, the following officers were elected:

*President*—Mathohniah Thomas, Salt Lake City.

*First Vice-president*—J. C. Wheelon, Garland.

*Second Vice-president*—Dr. Fred Taylor, Provo.

*Secretary and Treasurer*—Dr. E. G. Titus, Logan.

*Members of the Council*—Mrs. Martha C. Jennings; Professor Jacob Bolin, Salt Lake City; Dr. E. G. Gowans, Ogden.

It is stated in foreign journals that the scheme for a canal to open through communication between the Black Sea and Baltic by linking the systems of the Dneiper and Duna seems now in a way to be realized. It is said that the necessary capital of 450 million roubles will be supplied by a foreign country, and that official permission for the commencement of operations will at once be given. Great hopes are entertained of the commercial development likely to ensue from the making of the canal, which will open up an important route for the export not only of Russian corn, but of timber, ores, petroleum, etc., as well as for the import of coal. It is pointed out that the railway freight across Russia is at present some 20 kopeks per pood, to which some 4 or 5 kopeks must be added as sea-freight to Hamburg or England; that the southern sea-route from Odessa involves a freight of 7 or 8 kopeks, with an additional sum of anything up to 6 kopeks for railway transport to Odessa; whereas the freight from Kherson to Riga is reckoned at only 3 to 5 kopeks per pood by the canal now to be constructed. Another important scheme lately put forward is for a canal to open communication between Central Russia and Siberia by linking the systems of the Volga and Obi-Irtish. The proposed route would make use of the Chusov and a tributary, on the west of the water-parting; and the Reshotka, Isset and Tobol on the east, thus entering the Irtish close to Tobolsk. The length is 1,100 miles, and the waterway is designed to take vessels of 5½ feet draught and a length of 350 feet. The general question of the development of Siberian waterways will shortly, it is said, be investigated on the spot by a commission of engineers.

ACCORDING to *The British Medical Journal* an institute for Medical Research in South Africa is being established at Johannes-

burg on the southern portion of the ground lying to the west of the general hospital and to the south of the fort. There has hitherto been no medical research institute in South Africa. A veterinary institute was erected and equipped by the government some time ago at Dasbort, eight miles from Pretoria, but though the need for a medical research institute has been pressed by members of the medical profession, financial objections have prevented any forward movement. Recently, however, the government and the leaders of the mining industry collaborated, with the result that generosity on both sides has provided not alone for the building and equipment, but also its maintenance. The new institute at Johannesburg is to serve the whole of South Africa and will be called the South African Institute for Medical Research. The industrial diseases of the Transvaal will probably first call for consideration, owing to the mortality which they have occasioned, but the work will not be limited to these diseases, and it is hoped to attract skilled workers from Europe to aid the director in his researches; it is probable that research fellowships will be available for suitably qualified medical men desirous to carry out special lines of research. The proximity of the institute to the general hospital, which is the largest in South Africa, and the fact that it will be equipped with four wards, with twenty or thirty beds for the treatment of patients, will serve to associate the institute with medical work in Johannesburg. When the institute is in full working order it is probable that courses in bacteriology and pathology will be arranged for medical students. Two appointments have already been made to the staff. The director of the institute is Dr. Watkins-Pitchford, and the statistician, Dr. G. D. Maynard. Dr. Watkins-Pitchford was formerly house-physician to St. Thomas's Hospital, London; he studied plague in India, enteric fever in South Africa during the war, smallpox in London. For the last ten years he has been government pathologist and analyst for Natal, and last year was transferred by the union government to

Johannesburg. Dr. Maynard was formerly M.O.H. for the suburbs of Pretoria, and subsequently assistant medical officer to the Witwatersrand Association. It is expected that the building will be completed in about a year.

THE British secretary of state for the colonies has, as we learn from *Nature*, appointed a commission to study the nature and the relative frequency of the fevers occurring amongst the Europeans, natives and others in West Africa, especially with regard to yellow fever and its minor manifestations.

M. JULES DE PAYER, as we learn from foreign exchanges, has furnished particulars of his projected Arctic expedition, which is intended to leave France in the summer. With the support of the government and various societies, he will follow his father, the distinguished explorer, in making for Franz Josef Land. One of his objects is to locate the margin of the polar basin to the northeast of that archipelago, an investigation which, if successfully carried out, will provide data for an estimate of the relative areas of the basin and the continental shelf in that quarter of the Arctic region. A scientific staff will accompany M. de Payer, with equipment for the prosecution of research in all the various departments which have become associated with polar work; among them the investigation of the upper atmosphere by means of kites is specially indicated. The party will be provided for a sojourn of one year or longer in the north, its ship returning in the meantime. It is to be provided with two aeroplanes, the utility of which as instruments in polar research will be observed with interest: a visit to the pole itself is mentioned as a possibility, but does not appear as a prime object of the expedition. Wireless telegraphy will be installed at the headquarters.

THE Washington Academy of Sciences has held a field meeting including the region of Cape Henry and Yorktown, which left Washington by a special steamer on April 25 and returned on April 27.

THE regular monthly meeting of the State Microscopical Society of Illinois was held on April 10, 1913, at the rooms of the Chicago Press Club. The subject for the evening was "Bacteria, with Practical Demonstration in preparing Slides and Cultures," by Margaret Grant, A.M., M.D. At this meeting final reports of the recent soiree by the society and the Academy of Sciences, held in the academy building, Lincoln Park, were submitted, showing that there were twelve hundred persons in attendance. Sixty-one microscopes were in charge of forty-eight exhibitors.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE board of regents of the University of Nebraska, at its annual meeting, voted a general increase in salaries of deans and professors, distributing thus the \$35,000 additional maintenance voted by the last legislature.

THE faculty of the Ohio State University has adopted an arts-agricultural course, five years in length. The first three years, students will be registered in the Arts College; the last two years, in the Agricultural College. At the end of the fourth year, the degree of bachelor of arts will be given, and at the end of the fifth year, the bachelor of science in agriculture.

THE Phi Beta Kappa elections for the year at the University of Wisconsin indicate that women students excel men in scholarship, as twenty-two of the thirty-six elections were women.

PROFESSOR OSKAR BOLZA, of the University of Freiburg, is to offer courses this summer at the University of Chicago on "Linear Integral Equations" and "Functions of a Complex Variable." Other graduate courses in mathematics are announced on "Fourier Series," "Linear Continuum and Point-set Theory" (Moore); "Projective Geometry" (Bliss), and "Modern Theory of Analytic Differential Equations" (Moulton). Dr. F. A. Lindemann, of the University of Berlin, is to lecture throughout the summer quarter at the University of Chicago on "Kinetic The-