It should also be remarked that the matter of perfecting the northern route from Vladivostok to European ports via Behring Straits (so successfully navigated last year from Europe as far as the Yenisei River by the English navigator, Captain Webster, and from Vladivostok to Kolima River by a Russian vessel), and the charting of the new uncharted coast lines in many places on this route, is receiving attention from a special Russian expedition which sailed from Vladivostok at the opening of navigation this year. They will winter in the Arctic Sea and proceed next year on their voyage.

A. HRDLIČKA

THE REORGANIZATION OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA

At a meeting of the regents of the University of California in December, 1911, the Committee on Medical Instruction recommended that the departments of the Medical School in Berkeley and San Francisco be brought together in San Francisco as soon as possible, that the clinical years be put upon an academic basis, and that a proper teaching hospital and proper laboratories be provided in order to promote the best interests of the university as a whole, and of the Medical School in particular. It was declared the desire of the board to establish a medical school of the highest standard.

At a meeting in April, 1912, upon the recommendation of the Medical Faculty, the following plan of reorganization was adopted. Clinical instruction in the medical school is to be carried on in three main departments. (1)Gynecology and obstetrics: it was decided to put this department upon an academic basis at once and to allot full academic salaries for a professor and an assistant. (2) Medicine: this department to include pediatrics, neurology and dermatology. This department can not as yet be placed upon a full academic basis, but \$2,300 has been devoted to the payment of assistants for the current year. (3) Surgery: this department to include orthopedics, urology, ophthalmology, rhinology, otology and laryngology. As with medicine, there were not sufficient funds available this year to put the department upon a full academic basis, but \$1,800 was devoted toward paying three assistants.

In addition to the main departments, the work of the hospital pathologist was reorganized and an additional assistant professor of pathology was secured at a salary of \$2,400 a year. It was voted to grant \$1,200 for the work in radiography.

The budget voted to medicine 1912-13, for maintenance of the first two years, was:

Salaries Budgets	Total
Anatomy\$11,500 \$3,555	\$15,055
Physiology and physio-	
logical chemistry 8,120 3,000	$11,\!120$
Pathology and bacteriol-	
ogy 9,900 3,800	13,700
Toward academic instruction in the clin-	
ical years	12,000
For additional expenses of the clinical	
years:	
General budget	7,630
Special budget for university hospital	6,480
Assistant superintendent and hospital	
stenographer	2,400
Deficit	12,000
Total for medical instruction	80,385

In accordance with the plans adopted by the regents, a movement is on foot to provide a new university hospital. The present plans aim at four units of forty to fifty beds each, to be devoted respectively to surgery, medicine, diseases of women and diseases of children. Money has already been given (\$350,000) by private individuals to build and equip the departments of medicine and children's diseases. In order to carry on the work in the present buildings, the regents have granted \$14,000 for alterations in the hospital for accommodation of clinics, and \$6,000 for equipment of clinical and pathological laboratories. A children's ward has been added to the hospital.

SCIENTIFIC NOTES AND NEWS

THE following have been elected corresponding members of the Munich Academy of Sciences: Dr. Otto Struve, professor of astronomy at Berlin; Dr. Mittag-Loeffler, professor of mathematics at Stockholm; Dr. H. A. Schwarz, professor of mathematics at Berlin; Dr. Walther Nernst, professor of physical chemistry at Berlin; Dr. Sigismond Exner, professor of physiology at Vienna; Professor A. G. Nathorst, director of the Paleontological Museum at Stockholm, and Mr. Bailey Willis, of the U. S. Geological Survey.

DR. H. A. LORENTZ, professor of physics at Leiden, has been made an honorary member, and Dr. Ernest Rutherford, professor of physics at Manchester, and Dr. W. C. Brögger, professor of geology at Christiania, have been made corresponding members, of the Vienna Academy of Sciences.

THE honorary degree of D.C.L. has been conferred on Sir William Osler, regius professor of medicine at Oxford by Durham University.

THE Paris Academy of Sciences has awarded its Binoux prize (for the history of science) to Professor J. L. Heiberg, of the University of Copenhagen, for his works on the history of ancient mathematics and in particular for those on the method of Archimedes.

DIRECTOR BALLEY has been appointed to represent Cornell University at the inauguration of Dr. C. A. Duniway as president of the University of Wyoming on January 24. Besides making a speech at the inauguration, Mr. Bailey will make an address on the occasion of the laying of the corner stone of Wyoming's new agricultural building.

ON the evening of December 17, the Linnean Society of New York held its first annual banquet at which Mr. Frank M. Chapman was the guest of honor. The occasion had the twofold object of inaugurating a series of annual dinners and of honoring Mr. Chapman for his distinguished services to ornithology. Dr. Jonathan Dwight, Jr., president of the society, acted as toastmaster, and among other guests at the speaker's table besides Mr. Chapman were Dr. Henry Fairfield Osborn, Mr. John Burroughs, Dr. A. K. Fisher, Mr. George Bird Grinnell, Mr. T. Gilbert Pearson, Dr. Frederic A. Lucas, Mr. Spencer Trotter, Mr. Ernest T. Seaton and Mr. John H. Sage.

PROFESSOR H. J. WHEELER, for the past ten years director of the Agricultural Experiment Station of the Rhode Island State College, who recently resigned, has accepted the position as manager of the Agricultural Service Bureau of the American Agricultural Chemical Company of Boston and New York, with headquarters at 92 State St., Boston, Mass.

MR. BENJAMIN Boss has been appointed acting editor of the Astronomical Journal.

MR. H. D. GOODALE has recently been appointed by the trustees of the Massachusetts Agricultural College as research biologist in the department of poultry husbandry of the experiment station. Mr. Goodale graduated from Trinity College in 1903; after spending a year in graduate work at that institution, he spent three years at Columbia University as a special student of zoology. From 1907 to 1911 he was engaged in farming, and since 1911 has been employed by the Carnegie Institution of Washington in its department of experimental evolution.

THE cornerstone of the new dispensary building of the College of Medicine of Syracuse University was laid on December 14 by Chancellor Day. Afterwards addresses were made by Dr. William S. Thayer, of the Johns Hopkins University; Mr. Augustus S. Downing, assistant commissioner of education of the state of New York, and Mr. Alan C. Forbes, who spoke on behalf of the Syracuse Free Dispensary Association.

PROFESSOR MARSTON TAYLOR BOGERT, of the department of ehemistry, Columbia University, president of the Society of Chemical Industry, lectured on December 16, before the McGill Chemical Society, Montreal, on the subject of "The Classification of Carbon Compounds," and in the evening addressed the Montreal members of the Society of Chemical Industry at a banquet at Coopers Limited. On the following day he addressed the Toronto members of the society at a banquet at the Engineers' Club, Toronto, on the subject of "A Closer Cooperation between the Universities and Chemical Industries." DR. E. V. FARWELL, associate professor in the department of chemistry of the college of agriculture of the University of Wisconsin, lectured to the students of the department of chemistry, on December 18, on "The Rôle of Mineral Elements in Nutrition."

D_R. E. P. LYON, of St. Louis University School of Medicine, recently delivered the Founders Day address at the Bradley Polytechnic Institute, Peoria, III., on the subject, "Medicine and Engineering."

MR. AUSTEN CHAMBERLAIN will preside at a meeting at the Royal Colonial Institute, London, on January 14, in support of the fund he is raising for the extension and development of the London School of Tropical Medicine, when Sir Ronald Ross will give an address on the work of the school and the advantages of tropical medicine.

CERTAIN geological works of Dr. Alexander Winchell, former professor of geology at the University of Michigan, have recently been found at the state capitol at Lansing, where they have been kept since Dr. Winchell's death forty years ago. Over four hundred works are included in the collection, which is a very valuable one, including plates and hand drawings. The works are the property of the Michigan State Geological and Biological Survey, and will be published in an appropriate form.

THE valuable collection of microscopic slides and preparations left by the late Professor T. H. Montgomery, Jr., have been given by Mrs. Montgomery to the zoological department of the University of Pennsylvania. The collection comprises upward of 3,800 mounted pieces and slides, in addition to a large number of objects embedded in paraffin.

MR. WILLIAM B. TEGETMEIER, the distinguished English naturalist, known for his work on pigeons and other animals and for his cooperation with Charles Darwin in the study of variation, has died in his ninety-seventh year.

MR. CHESTER A. REED, curator of the Worcester Natural History Society and the author of several books on bird life, died at Worcester on December 16.

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MR. EUGENE SMITH, a Brooklyn engineer, interested in natural science and editor of *The Aquarium*, died on December 25, aged fiftytwo years.

DR. ERNST VON KOKEN, professor of geology at Tübingen, has died at the age of fifty-two years.

DR. WILHELM FIEDLER, formerly professor of mathematics in the Zurich Technical School, has died at the age of eighty years.

M. AIMÉ PAGNOUL, formerly director of the Agricultural Station at Pas-de-Calais, has died at the age of ninety years.

THE examination for the position of curator of the State Natural History Museum of Illinois, recently mentioned in these columns, has been postponed by the civil service commission until January 25, in order to secure more applicants. This is a position which pays \$3,000 per year. Applications should be on file in the office of the state Civil Service Commission, Springfield, Ill., not later than January 18.

THE next meeting of the International Union for Solar Research will take place at Bonn beginning August 1, 1913.

An international congress for physical education will be held in Paris, March 17-20, 1913, under the auspices of the faculty of medicine. It is expected that the United States will be represented.

In view of the seventeenth International Congress of Medicine, which is to take place in London in 1913, a committee has been formed for the purpose of organizing a museum, and Professor Arthur Keith, conservator of the Royal College of Surgeons' Museum, has been chosen chairman. Accommodation has been secured at the Imperial College of Science, South Kensington, and the museum will be arranged in this place as far as is possible in correspondence with the sections of the congress. It has been decided that, as the meeting is to take place in London, and as the visitors will doubtless desire to inspect the metropolitan hospitals and other great institutions, material will not be collected from the museums of the metropolis. The committee are therefore seeking exhibits from provincial institutions and from private collections.

IT is stated in the British Geographical Magazine that the Paris Society of Natural Sciences has succeeded in making all arrangements for the establishment of a magnificent national park, of which an account was given by Dr. Paul Sarasin at the September meeting of the society at Altdorf. The park is situated in the canton Grisons, in the lower valley of the Inn, near Zernetz, and consists meantime of an uninterrupted stretch of land about forty square miles in extent, which it is hoped later to increase to nearly eighty square miles. All this vast territory will be wholly withdrawn from human interference, and set aside as a biological preserve. It contains at present chamois, a few bears, and a rich flora. Some paths are to be made, together with blockhouses to suppress poaching, and regular observations will be undertaken. Part of the territory has been leased for twenty-five years, and the rest for ninety-nine years, and the cost of rent, surveillance, and observations are to be defrayed out of the funds supplied by a popular league, with a very low annual subscription.

IT will be remembered that at the Dundee meeting of the British Association in September last the president of the Zoological Section, Dr. P. Chalmers Mitchell, F.R.S., took as the subject of his address "The Preservation of Fauna." At the close of the meeting the general committee passed on to the council, for consideration, a resolution, which has now been adopted in the following terms:

That the British Association for the Advancement of Science deplores the rapid destruction of fauna and flora throughout the world, and regards it as an urgent duty that steps should be taken, by the formation of suitably placed reserves, or otherwise, to secure the preservation of examples of all species of animals and plants, irrespective of their economic or sporting value, except in cases where it has been clearly proved that the preservation of particular organisms, even in restricted numbers and places, is a menace to human welfare.

THE thirtieth expedition of the Liverpool School of Tropical Medicine, under Dr. Harald Seidelin, of the Yellow Fever Bureau of the school, sailed from Southampton for Jamaica on December 17. The main object of the expedition is to investigate the disease called "vomiting sickness," which is often fatal to children. The expedition has been promised the support of the English government and of the government of Jamaica.

THE Ohio Academy of Science held a successful meeting at the Ohio State University from November 28 to 30, 1912. The program contained about fifty papers on various subjects in the fields of zoology, botany, geology and physics. The physicists organized a new section in the academy during the past year and participated in the program of this annual meeting for the first time. Eleven papers on various subjects in physics were presented. Mr. Emerson McMillin, of New York, renewed his annual donation of \$250 for research work to be conducted under the auspices of the academy. This gift has been continued for a number of years and has been the means of assisting a large number of important scientific investigations. The Biological Survey of Ohio, which was organized during the past year through the cooperation of the Ohio State University and fourteen other colleges of the state, was heartily commended by resolution and the earnest support of the academy was pledged to the undertaking. Another resolution of importance adopted by the academy was one calling for legislation by the state to prevent the propagation of the feeble-minded, insane and habitual criminal. Professor L. B. Walton, of Kenyon College, Gambier, and Professor E. L. Rice, of Ohio Wesleyan University, Delaware, were elected president and secretary, respectively, for the coming year.

THE University of Minnesota is offering a series of lectures upon "Modern Developments in Science." These lectures are given by members of the regular staff of instruction, on Wednesday evenings, in the chemistry building. The program of the series follows:

November 13—"Practical Applications of the Gyroscope," Assistant Professor B. L. Newkirk.

November 20—"Comets I have Known," Professor F. P. Leavenworth.

January 22---- 'A Geological Exploration in

Southwest Colorado," Professor W. H. Emmons. January 29—"American Metal Mining," Professor Chas. E. van Barneveld.

February 26—"Heredity and Eugenics," Pro-Tessor H. F. Nachtrieb.

March 5------ 'Plants and the Cost of Living," Professor F. E. Clements.

March 19—"Modern Warfare against Grasshoppers; and Protective Coloration and Mimicry of Insects," Professor F. L. Washburn.

April 16---"Recent Progress in the Study and Cure of Cancer," Dr. H. E. Robertson.

April 23—''Modern Surgery,'' Dr. A. T. Mann. April 30—''The Two Most Important Epochs in the History of Modern Medicine: the Discovery of Vaccination and the Discovery of the Relation of Microorganisms to Disease and the Application of the Antiseptic Principle to the Practise of Surgery,'' Dr. Burnside Foster.

May 7----- 'Living with Head Hunters,'' Professor Albert E. Jenks.

WE learn from the *Geographical Journal* that the attention directed of late years to the antiquarian remains at Tiahuanacu has led the Bolivian Minister of Public Instruction, at the instance of Señor Ballivián, to provide funds for the systematic excavation of the site of the ruins, with a view to saving them from further depredations of a kind to which they have been subject in the past. The work has been carried out under the supervision of the director of the National Museum, Dr. Otto Buchtien, and a report on the results so far gained has been circulated by Señor Ballivián. At a depth of from 3 to 10 feet below the surface a large quantity of pottery was found, of pre-Inca age, many of the objects being in a perfect state of preservation. They at once rivet the attention by the fineness of the material, and in the case of the cups, bowls, etc., by their artistic form as well as by the excellence and freshness of the coloring. The diversity of the ideographs and pictographs represented on them will demand special study by experts. Among the smaller objects, a human figure in silver is interesting as showing the nature of the garments worn in that ancient time. Worked stones have also been found, and skulls showing distinct traces of deformation. One of the latest discoveries had been a skull, belonging apparently to an ancient race, and showing the frontal suture and larger in all its dimensions than skulls of the present day. Further reports are promised as the work progresses.

UNIVERSITY AND EDUCATIONAL NEWS

THE Hamburg senate has adopted the proposal to found a university there consisting of three faculties—law, philosophy and colonial science. These are to be supported by the interest on \$6,250,000, which has been appropriated for the purpose by the city.

THE program for the exercises at the dedication of Lincoln Hall, University of Illinois, to be held on February 12, includes addresses by Mr. Hugh Black, Governor Deneen and Bishop McDowell of Chicago. Lincoln Hall was made possible by an appropriation of \$250,000 by the legislature in 1909, the one hundredth anniversary of Lincoln's birth and it was decided to give the building its present name and dedicate it to the study of humanities.