tions of potassium carbonate. In such solutions the salt seems to act as a potassium salt of the radial KCO, and forms with salts of certain metals double carbonates. When, for example, salts of copper, manganese, calcium, cobalt, etc., are added to a concentrated solution of potassium carbonate, double carbonates are formed, which crystallize out on standing, but which are decomposed on diluting the solutions. The formulæ of these salts are $CuK_{\mathfrak{g}}(CO_{\mathfrak{g}})_{\mathfrak{g}}$, $MnK_{\mathfrak{g}}(CO_{\mathfrak{g}})_{\mathfrak{g}}$, $CaK_{o}(CO_{s})_{o}$ CoK₂(CO₃)₂, etc., which might be looked upon as Cu(KCO₃)₂, etc.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

THE National Academy of Sciences will hold its annual stated session at Washington on April 19th, 20th and 21st.

The third regular meeting of the Chicago Section of the American Mathematical Society will be held at the University of Chicago, on Saturday, April 9, 1898, the first session opening at 10 o'clock a.m., in Ryerson Physical Laboratory.

THE bequests made by the late Professor Cope to the University of Pennsylvania are now being placed in the Library and in the Biological Hall. The bequests, as we have already stated, fall under five heads: First, the scientific library; second, the Wheatley collection of fresh water mollusca; third, the Wheatley collection of minerals; fourth, the Hyrtl collection of the osteology of fishes; fifth, Professor Cope's collection of the osteology of vertebrates. The scientific library contains many valuable sets of scientific journals, monographs and books of reference. Professor Cope purchased the Hyrtl collection of the osteology of fishes for \$8,000, and the osteological collections made by Professor Cope himself are of great value.

THE French Minister of Commerce has issued a decree instituting twelve congresses to be held during the Paris Exposition of 1900 as follows: 1. Education; 2. Fine Arts; 3. Mathematical Sciences; 4. Physical Sciences and

their Applications; 5. Natural Sciences; 6. Medical Sciences; 7. Engineering and Transportation; 8. Agriculture; 9. Political Economy and Statistics; 10. Social Sciences, including Hygiene; 11. Geography, and 12. Industry and Commerce. The Minister of Commerce will appoint twelve committees who will report to a commission that will have charge of the arrangements. M. Gariel, of the University of Paris, and Secretary of the French Association for the Advancement of Science, is in charge of the organization of the congresses, and a special building will be erected in the Exposition grounds for the meetings.

Dr. Tarleton H. Bean, who, as we reported last week, was asked by the President of the Park Board to resign the superintendency of the Aquarium, refused to do this, as no grounds were given for the request. The office has now been abolished, but it is understood that Dr. Bean will contest this subterfuge in the Courts.

ONE of the first appointments to the University Table at Naples is that of Dr. J. P. Halsey, who graduated at the College of Physicians and Surgeons in 1893, and since July, 1895, has been studying organic and physiological chemistry in Germany. He worked in Freiburg under Baumann until the latter's death, and since then in Strassburg under Hofmeister. He has just finished an investigation upon Tyrosin, and his plan at Naples is to experiment upon some of the lower organisms, which may throw light upon the origin of urea.

SURGEON-MAJOR DAVID PRAIN has been appointed Superintendent of the Royal Botanical Garden at Calcutta.

THE following appropriations were made during 1897, from the Bache fund, Natural Academy of Sciences:

March 18: To Professor A. S. Packard, for	
an investigation of the transformations of	
North American bombycine moths	\$100
March 29: To Professor R. H. Chittenden, for	
an investigation of the poisonous fungi or	
toadstools of the country	500
April 29: To Professor Albert A. Michelson,	
for the construction of a new harmonic an-	
alyzer and integrator	400

May 1: To Dr. John S. Billings, for an investigation of the colon bacillus group of organisms, being a continuation of the research upon the variability of bacteria, previously appropriated from the Bache fund..... 500 May 5: Professor A. A. Michelson, for an investigation of a two-decimeter standard of length, which is to be determined in terms of the wave-lengths of red cadmium radia-? tions by the interference method..... May 17: To Professor Ira Remsen, for an investigation of the atomic weight of cadmium. 400 May 22: To Alexander Agassiz, for assistance in paving part of the expenses of borings to be made in the Fiji Islands to determine the thickness of coral reefs...... 1,200 December 7: To Professor A. S. Packard, for an investigation of the metamorphoses of the bombycine moths, in continuation of work already published in the last volume of Memoirs of the National Academy..... 100

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THE following officers of the sections have been appointed, as we learn from Nature, for the Bristol meeting of the British Association: Section A-President: Professor W. E. Ayrton, F.R.S. Vice-Presidents: Professor Rücker, F.R.S., Professor S. P. Thompson, F.R.S. Secretaries: Professor A. P. Chattock, Professor W. H. Heaton (Recorder), J. L. Howard, W. Watson, E. T. Whittaker. Section B-President: Professor F. R. Japp, F.R.S. Vice-President: Professor W. Ramsay, F.R.S. Secretaries: Dr. C. A. Kohn (Recorder), Dr. T. K. Rose, F. Wallis Stoddart. Section C-President: W. H. Hudleston, F.R.S. Vice-President: E. Wethered. Secretaries: G. W. Lamplugh, Professor H. A. Miers, F.R.S. (Recorder), E. Wilson. Section D-President: Professor W. F. R. Weldon, F.R.S. Vice-Presidents: Professor F. Gotch, F.R.S., Professor L. C. Miall, F.R.S. Secretaries: W. Garstang, Dr. A. J. Harrison, W. E. Hoyle (Recorder). Section E—Vice-Presidents: Colonel F. Bailey, Dr. J. Scott Keltie. Secretaries: H. N. Dickson, Dr. H. R. Mill (Recorder), A. J. Herbertson, H. C. Trapnell. Section F-President: Dr. J. Bonar. Vice-President: Professor E. C. K. Gonner. Secretaries: E. Cannon, Professor A. W. Flux, H. Higgs (Recorder), W. E. Tanner. Section G-President: Sir John Wolfe-Barry, F.R.S. Vice-President:

G. F. Deacon. Secretaries: Professor T. H. Beare (Recorder), H. W. Pearson, W. A. Price, Professor John Munro. Section H—President: E. W. Brabrook, C.B. Vice-President: C. H. Read. Secretaries: H. Balfour, J. L. Myers (Recorder), Dr. G. Parker. Section K—President: Professor F. O. Bower, F.R.S. Vice-President: Professor H. Marshall Ward, F.R.S. Secretaries: A. C. Seward (Recorder), Professor J. B. Farmer, J. W. White.

MR. WILLIAM OGILVIE, of the Geological Survey of Canada, gave a lecture to the Royal Geographical Society on 'The Geography and Resources of the Klondike Region,' on March 23d.

THE following are among the lecture arrangements at the Royal Institution, London, after Easter: Lord Rayleigh, three lectures on 'Natural Philosophy;' Dr. E. E. Klein, two lectures on 'Modern Methods and their Achievementsin Bacteriology; Mr. J. A. Thomson, two lectures on 'The Biology of Spring.' The Friday evening meetings of the members will be resumed on April 22d, when Mr. W. H. M. Christie, the Astronomer Royal, will deliver a discourse on 'The Recent Eclipse.' Succeeding discourses will probably be given by Professor A. Gray, Mr. E. A. Minchin, Professor W. A. Tilden, Mr. Justice Madden, Lieutenant-General Sir A. Clarke, Professor W. M. Flinders Petrie, Lord Rayleigh and others.

An attempt is being made to establish a scholarship in botany at Barnard College in memory of the late Miss Emily L. Gregory, who was in charge of the department of botany at the College from its establishment.

SIR WILLIAM TURNER, who holds the chairof anatomy at Edinburgh University, has been asked to allow himself to be nominated for the presidency of the General Medical Council, vacant by the death of Sir Richard Quain.

Dr. W. B. Benham, who succeeds the late Professor Parker in the chair of zoology in the University of Otago, New Zealand, has been given a dinner at Oxford in view of his departure from that University, and has been presented with a piece of plate by his present and former students.

The Royal Academy of Sciences of Belgium has proposed eight questions for essays in 1898-

and six questions for 1899. Prizes of the value of 600 fr. (in one case 800 fr.) are offered for the solution of each of these questions. Further details may be obtained from the Secretary, Palais des Academies, Bruxelles.

THE Schnyder von Wartensee foundation in Zurich will award, in 1900, a first prize of 3,000 fr. and other prizes amounting to 1,500 fr. for monographs on the peat moors of Switzerland.

The botanical department of the University of Pennsylvania has received a gift of a collection of dried plants and seeds from the Biltmore estate and specimens of fungi from Dr. J. T. Rothrock.

About sixty original drawings by the late W. Hamilton Gibson, largely of entomological subjects, have been purchased for the departments of science and art of the Teachers' College, N. Y.

THE Massachusetts Senate has concurred with the House in voting an appropriation of \$180,000 to continue the war on the gypsy moth.

THE Chairman of the House Committee on Military Affairs has introduced a bill increasing the number of medical officers in the navy by fifteen additional assistant surgeons, and authorizing the Surgeon-General of the Army, in emergencies, to appoint, with the approval of the Secretary of War, as many contract surgeons as may be necessary, at not exceeding \$150 per month. The fifteen new men are to be appointed with the rank of First Lieutenant, after examination by an army medical examining board.

M. AUDIFFRED, member of the French Chamber of Deputies, has asked the French government to create French medical stations in China, in order to increase French influence in that country.

PROFESSOR FREDERIC STARR, of the University of Chicago, has returned from a trip through Mexico, having made important investigations on the Otomi Indians.

It is stated in *Natural Science* that Mr. C. W. Andrews, whose stay in Christmas Island, S. Java, is extended for the requirements of his researches, has forwarded five more cases of specimens of natural objects to the British Museum.

THE most serious earthquake shock from

which the Pacific coast has suffered for twelve years occurred just before midnight on March 30th. Many buildings were seriously damaged.

A PRELIMINARY meeting of the British committee formed to assist in the celebration, in May next at Lisbon, of the fourth centenary of the discovery of the Cape route to India by Vasco da Gama was held on March 21st at the rooms of the Royal Geographical Society. Sir Clements Markham presided and in a speech referred to the great geographical interest of the event which would be celebrated at Lisbon on May 17th to 20th, and said that a dinner and also a meeting would be held in connection with the celebration in May at the rooms of the Royal Geographial Society. Sir A. Rollit said it had been arranged to hold a meeting in May at the India Office, over which the Secretary of State had promised to preside, and the Department had also sent charts and plans to the exhibition at Lisbon. Resolutions of congratulation to the King and people of Portugal upon the occasion were passed and were cordially acknowledged by Sir Luiz de Soveral, and a sub-committee was appointed to carry out the arrangements.

The British government does not seem inclined to assist greatly in an Antarctic expedition. In the House of Commons it has been stated that the Admiralty have been in communication with the Royal Society with reference to Antarctic exploration. The Board has been unable to promise cooperation either by the loan of ships or of officers, as officers cannot be spared at present for expeditions which may keep them away from their ordinary duties for long periods of time, but they have informed the Society that if they can render any assistance by the loan of instruments, or by any information which their experience enables them to give, they will be very glad to do so.

The St. Petersburg correspondent of the London *Times* reports that on March 19th Drs. Jeaffreson and Lowry left St. Petersburg for Hangö with 70 northern dogs bought from the Samoyeds and destined for the forthcoming English expedition to the South Pole which is being fitted out by Sir George Newnes. These sledge dogs will be shipped from Hangö, the

nearest ice-free port from St. Petersburg, and taken on board the boat to be employed in the expedition, now lying at Christiania. Dr. Jeaffreson has been travelling during the winter in the wilds of the Petchora and the tundras of Kanin peninsula. This latter region, he found, had been given up almost entirely to a colony of pirates, who are probably the descendants of Russian criminals formerly banished to the region of Archangel. Last year they wrecked a Russian schooner, and the bodies of the crew were subsequently found by the help of dogs buried far off in the interior. Dr. Jeaffreson also explored the interior of the Yalmal Peninsula or Samoyed land, which has hitherto been almost unknown, and he intends, if possible, to organize an expedition to Novaya Zemlya."

A DESPATCH from Stockholm states that Herr J. Stadling, who accompanied Andrée's expedition to Spitzbergen in 1896, has been appointed by the Swedish Anthropological and Geographical Society to undertake a search through Siberia in order to make inquiries as to the fate of Andrée's balloon expedition. For this purpose Herr Stadling has received the Vega stipendium from the Society. He starts with a companion from Stockholm early in April, and the journey will last probably until January next.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Maryland House has concurred with the Senate, by a vote of 56 to 22, in appropriating \$50,000 a year for two years to Johns Hopkins University.

THE proposed amalgamation of Harvard University and the Massachusetts Institute of Technology has been the subject of conferences between committees of both institutions, but the plan has now been abandoned.

THE University of Chicago has received a gift of about \$150,000 from an anonymous donor.

MISS GOULD has given a further gift of \$10,-000 toward the endowment of the engineering school of New York University.

Mr. Chester W. Kingsley, whose gift to Worcester Academy was reported last week, has now given \$25,000 to Colby University.

THE governing board of the Sheffield Scientific School has established six new scholarships of \$100, the equivalent of remitted tuition for the same number of students.

MR. HAROLD HEATH, now fellow of biology at the University of Pennsylvania, has been appointed assistant professor of zoology in Stanford University.

Professor F. W. Card has resigned the chair of horticulture in the University of Nebraska, which he has filled for five years, and has accepted a similar position in the Rhode Island Agricultural College. His resignation takes effect in August and he assumes his new duties on September 1st.

CORNELIUS L. SHEAR, fellow in botany in the University of Nebraska, has been appointed Assistant Agrostologist in the Division of Agrostology of the U. S. Department of Agriculture, Washington, D. C., his duties to begin April 1st.

The London University Commission Bill has been read a third time before the House of Lords and passed. It is said to be likely that it will also be passed in the House of Commons unless obstruction prevents its consideration.

THE University of Paris has been authorized to borrow 1,700,000 fr. for the construction on the rue Cuvier of buildings and laboratories for instruction in the sciences preparatory to the study of medicine, and for the completion of the laboratory of physiological botany at Fontainebleau.

THE government of Württemberg has just authorized the erection of a laboratory of hygiene in connection with the medical department of the University of Stuttgart.

SIR WILLIAM FRASER, formerly Deputy-Keeper of the Records of Scotland, who died on March 13th, has, by his will, left to the University of Edinburgh £25,000 for the foundation of a chair to be called the Sir William Fraser Professorship of ancient history and palæography, £10,000 for the purposes of the library and one-half of the residue of his estate, which is expected to amount to between £9,000 and £10,000, for general requirements, bursaries, research, publications, etc.

THE principalship of University College,