

I therefore venture to lay before you the following information: There are 290 members of the present House of Commons so thoroughly in accord with our aims that they have given me authority to publish their names as supporters. If we add to this the number of members of Parliament who would be influenced by a debate in the House of Commons to vote in our favor, we are convinced that we are now strong enough to carry a bill.

During the last four or five weeks, no less than sixty city, town, and county councils have passed resolutions to the effect that it is desirable that the reform should be made in the interest of commerce and education.

One of the most definite results, in fact, I think I may say, the most definite result, of the conference of the colonial premiers was the passing of a resolution in favor of the adoption of the metric weights and measures throughout the British Empire. This will have a most important result, and will render certain the early passing of a bill to give effect to those views.

All the chambers of commerce in this country, nearly all the school boards, the trades unions, and a great number of societies of various kinds have for a long time been active supporters of my association.

The attitude of our premier may be gathered from some remarks he made to the deputation which waited upon him in regard to this question in 1895. He said:

"If I may express my own opinion upon the merits of the case, there can be no doubt whatever that the judgment of the whole civilized world, not excluding the countries which still adhere to the antiquated systems under which we suffer, has long decided that the metric system is the only rational system."

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#### SCIENTIFIC NOTES AND NEWS.

A COMMITTEE has been formed for the erection of a public memorial of the late Professor Virchow in Berlin, with Professor Waldeyer as chairman.

A MONUMENT, consisting of a pedestal and a bust by the sculptor, Marqueste, is to be

erected in the Paris Museum of Natural History, in memory of Alphonse Milne-Edwards.

MR. WILLIAM BATESON, fellow of St. John's College, Cambridge, and author of important contributions to zoology, is at present in the United States.

DR. F. Y. EDGEWORTH, professor of political economy at Oxford University, known for his important contributions to statistics and mathematics, will give a course of lectures at Harvard University, beginning about the middle of the present month.

COL. H. A. YORKE, of the British Royal Engineer Army Corps, is at present in the United States, for the purpose of inspecting the electrical railway system.

MR. JAMES MOONEY, of the Bureau of Ethnology, recently returned from studies among the Kiowa Indians and expects to leave shortly to resume his work which will be continued through the coming winter. He is now engaged in the preparation of a set of models of Kiowa shields and tipis. Each of the latter is being made by the man who alone has a right to use it. The former are all by native artists working under direct instruction of the owner of the shield. Mr. Mooney is having a similar set of models of Cheyenne shields and tipis prepared for the Field Columbian Museum, Chicago.

PROFESSOR CHARLES E. BESSEY has been appointed by the University of Nebraska to be its delegates to the inaugural exercises of Chancellor Strong, of the University of Kansas, October 17.

PROFESSOR J. P. IDDINGS, professor of petrology in the University of Chicago, has been elected a Foreign Member of the Scientific Society of Christiania, Norway.

THE King of Italy has conferred the cross of a grand officer of the Italian Order of the Crown on Mr. G. Marconi.

MR. ANDREW CARNEGIE will be installed as rector of the University of St. Andrews on October 22. Dr. Andrew D. White will at the same time receive the degree of LL.D. Dr. White will also receive the degree of D.C.L. at Oxford, where he will attend the three hundredth anniversary of the Bodleian Library.

MR. A. R. RUGGLES, a graduate of Cornell University, has been elected assistant to the state entomologist of Minnesota.

MR. WILLIAM S. MYERS, until last year associate professor of chemistry at Rutgers College and now director of the Chilean Nitrate Works, has been elected a trustee of Rutgers College.

LIEUTENANT ROBERT E. PEARY has been advanced to the rank of commander.

PROFESSOR SAPPER, of Tübingen, has undertaken an expedition to study earthquakes in Guatemala and Martinique.

THE Harveian Oration before the Royal College of Physicians of London will be delivered by Dr. David Ferrier, F.R.S., on October 18.

AN association has been formed to buy the house in Nantucket in which Maria Mitchell, the astronomer, was born. It is proposed to place there her library and to establish a museum.

WE regret to note the death of M. Damour, the eminent French chemist, aged ninety-four years; of Dr. Theodor von Heldreich, director of the Botanical Gardens at Athens, at the age of eighty years; and of Professor O. G. Nordenström, professor at the Stockholm School of Mines.

IN connection with the recent death of Professor H. Wild, we learn that his widow, Madame R. von Wild (56 Englischviertel Zurich, Switzerland), is willing to sell her husband's large library, bearing chiefly on meteorology, magnetism, metrology and physics. These subjects are generally not well represented in American libraries, and we hope that Professor Wild's collection will be secured for the United States.—C. A.

OWING to the fact that the educational authorities of New Orleans found themselves unable to provide satisfactory hotel and other accommodations for the Department of Superintendence during the Mardi Gras festival, the executive committee of the department have, by authority of the action of the department at the Minneapolis meeting, changed

the meeting to Cincinnati, Ohio, February 24, 25 and 26.

FOREIGN journals announce that a donation of 50,000 rupees has been made by the government of India to the Pasteur Institute of India at Kasauli, and the Punjab government has handed over to the central committee of the institute as a free gift Drumbar House at Kasauli for the accommodation of the poorer class of European and Eurasian patients, while Sir Charles Rivas has given 10,000 rupees to the institute for the years 1902-3; grants have also been made by the governments of Burma and the United Provinces of Agra and Oudh, and the chief commissioners of the Central Provinces and Assam.

*Nature* reports that the zoological station of Arcachon, under the direction of M. le Dr. F. Jolyet, professor of medicine in the University of Bordeaux, is now in full work, but that the laboratories are not fully occupied. A new subsidiary station has recently been opened at Guethary, a small bathing place near St. Jean de Luz, which is stated to have an excellent beach for dredging operations.

A NEW institute, built by the Danish government for the production of serum and for the prosecution of bacteriological research, was opened on September 9 at Copenhagen.

A THERAPEUTICAL society has been organized in Great Britain with Sir W. T. Thiselton-Dyer as the first president.

*Nature* states that part of an expedition for the survey of the Gold Coast has set sail from Liverpool. The remaining members of the expedition, numbering between thirty and forty, consisting of trained surveyors from the Ordnance Survey and surveyors from Queensland and New Zealand, will leave for West Africa on October 4.

THE medical inspectors last week excluded from the schools of New York City 6,524 children afflicted with contagious diseases.

A CIVIL service examination will be held on October 21, to fill the positions of irrigation engineer and assistant engineer or hydrographer under the Geological Survey at a salary of \$1,000 to \$2,000 per annum, according

to experience and results of examination. We may again call attention to the examination to be held on the same day for the position of aid in the Coast and Geodetic Survey, where fourteen vacancies are to be filled. Aids are appointed at a salary of \$720 per year. The next step in the line of promotion is to the salary of \$900 as aid, and thence to assistant at \$1,200 and then upward by steps of \$200 each. These statements of salary are misleading unless taken in connection with the fact that necessary traveling expenses incurred in the line of duty are paid by the government, and that in addition to his salary he is paid an allowance for subsistence to cover the ordinary living expenses while on field duty.

*Nature* gives the following comparison of the attendance at the Belfast meetings of the British Association in 1874 and 1902:

	1874.	1902.
Old Life Members.....	162	243
New Life Members.....	13	21
Old Annual Members.....	232	314
New Annual Members.....	85	84
Associates .....	817	647
Ladies .....	630	305
Foreign Members.....	12	6
	1951	1620

It will be noticed that there were more men of science in attendance this year than twenty-eight years ago, but fewer tickets were purchased by local citizens. *Nature* remarks, "It has been questioned whether this falling off, especially in the number of ladies' tickets, may not be ascribed in a considerable degree to the educational methods of Ireland and their effect on the tastes of those brought up under their influence within the last thirty years." The fact, however, probably is that in Great Britain, as in America, a meeting of the Association, as it becomes more important scientifically, becomes less interesting socially. It is becoming increasingly difficult to bridge the gap between the professional man of science and the amateur scientist.

THE Bureau of Forestry has established a dendro-chemical laboratory in cooperation with the Bureau of Chemistry. The plans for the organization of the new laboratory were prepared by Dr. H. W. Wiley, chief of the

Bureau of Chemistry, of the U. S. Department of Agriculture, and were approved by Secretary Wilson and Mr. Pinchot, chief of the Bureau of Forestry. Mr. Wm. H. Krug has been put in charge of this laboratory, which is the first of its kind in the United States, if not in the world.

A VALUABLE work of reference to the publications on North American geography, geology, paleontology, petrology and mineralogy covering the last nine years of the century, from 1892 to 1900, inclusive, has recently been issued by the United States Geological Survey as Bulletins Nos. 188 and 189. These books of reference contain a full list of the papers, numbering over 6,500, on the above subjects which have appeared during the period; they are taken from nearly 200 different American and foreign publications. The papers cover a wide range of subjects, and for convenience are classified both by topics and by the names of the authors. The compilation is the work of F. B. Weeks, of the Geological Survey.

A COURSE of nine lectures on science and travel has been arranged by the Field Columbian Museum, Chicago, for Saturday afternoons in October and November at 3 o'clock. The subjects, dates and lecturers are:

October 4, 'Past and Future of the South Appalachian Mountains,' Dr. J. A. Holmes, State Geologist, North Carolina.

October 11, 'The Salmon and Salmon Fisheries of Alaska,' Dr. Tarleton H. Bean, Chief of the Department of Fish and Fisheries, St. Louis Exposition, 1904.

October 18, 'Flying Reptiles,' Dr. S. W. Williston, Professor of Paleontology, University of Chicago.

October 25, 'Invisible Stars,' Professor Edwin B. Frost, Yerkes Observatory, University of Chicago.

November 1, 'The Insect Life of Ponds and Streams,' Dr. Jas. G. Needham, Lake Forest College.

November 8, 'A Naturalist's Visit to Cuba,' Dr. C. H. Eigenmann, Director, Biological Station, Bloomington, Indiana.

November 15, 'The Mythologic Age—The Indian and the Buffalo,' Dr. George A. Dorsey, Curator of Anthropology, Field Columbian Museum.

November 22, 'The Fishes of Mexico—A Study in Geographical Distribution,' Dr. S. E. Meek, Assistant Curator, Department of Zoology, Field Columbian Museum.

November 29, 'The Navaho,' Mr. C. L. Owen, Assistant Curator, Division of Archeology, Field Columbian Museum.

WE learn from the *British Medical Journal* that an Institute of Colonial Medicine has recently been established in Paris, which is open to foreign as well as to French medical practitioners. Courses of theoretical instruction and laboratory demonstrations will be given in the laboratories of the faculty of medicine, while clinical teaching will be given in the Hôpital d'Auteuil. The scheme of instruction comprises a course on bacteriological and hæmatological technique given by Professor Chantemesse; one on parasitology by Professor Blanchard; one on tropical surgery by Professor Le Dentu; one on tropical ophthalmology by Professor de Lapersonne; one on tropical pathology and hygiene by Professor Wurtz; and one on tropical skin diseases by Dr. Jeanselme. The director of the institute is Professor Brouardel; the dean, Professor Debove.

It is stated in *Nature* that the following rewards are offered by the government of South Australia for the discovery and working within the state of a deposit or deposits of marketable mineral manure—500*l.* if found on crown lands; 250*l.* if found on freehold lands. It is stipulated (1) that the deposit is easily accessible and within a reasonable distance of a railway or seaport, and not within twenty-five miles of any discovery on account of which any bonus has been paid; (2) that the deposit is sufficiently abundant and is available at a price which will allow of it being remuneratively used for agricultural purposes; (3) that the product is of a good marketable quality, averaging not less than 40 per cent. of phosphate of lime. In the event of a phosphate of a lower average composition being discovered, it may be recommended that a portion of the reward be paid. Applications must reach the Minister for Agriculture, Adelaide, not later than December 31.

THE rapid progress which the U. S. Geological Survey is making in the topographic survey of New York, conducted in cooperation with the state, is indicated by a recent report of this work by Mr. H. M. Wilson, geographer in charge for the Geological Survey, to the Hon. E. A. Bond, state engineer and surveyor. Eight parties were in the field, engaged in the mapping of twenty different sections or 'quadrangles.' Among the sections mapped in whole or in part were the Hobart, Kingston, Gilboa, Orwell, Boonville, Carthage, and Highmarket quadrangles, which were mapped under the supervision of Topographer J. H. Jennings, with E. G. Hamilton as chief assistant. Other quadrangles in which topographic work was carried on were the Nineveh, Greene, Richmond, Copake, and Bainbridge, also the Wayland, Bethany, and Chautauqua, the work being in charge, respectively, of E. G. Hamilton, W. R. Harper, C. C. Bassett, A. H. Bumstead, A. C. Roberts, and Gilbert Young. On Long Island the Setauket quadrangle was partially completed by G. H. Guerdrum, topographer, assisted by G. S. Smith, topographer, and in the Adirondacks work was done on the St. Regis, Saranac Lake, and Long Lake quadrangles under George H. Guerdrum and G. S. Smith, topographers, and W. R. Harper, T. F. Slaughter, and J. M. Whitman, Jr., assistant topographers. The total result of the work of these parties was the mapping of 452 square miles and the running of 395 miles of spirit levels and 460 miles of road traverse. In addition to the above topographic work, three parties under Professor A. H. Thompson, geographer, and Messrs. E. L. McNair and Oscar Jones, topographers, were engaged in primary triangulation and traverse; they occupied eight stations, erected signals, and ran 63 miles of primary traverse. Topographic maps embodying the results of this and subsequent work of the season will be prepared during the coming fall and made available as soon as possible.

M. DE FONVIELLE informs *Nature* that M. Camille Pelletan, Minister of the French Marine and of the Colonies, has placed the *Epée*, a torpedo destroyer, 306 tons, 62 men, at the

disposal of Comte de la Vaulx for purposes of aeronautical manœuvres on the Mediterranean, with a new balloon. It may be remembered that last year Comte de la Vaulx tried to cross the Mediterranean from Toulon with a large balloon made captive by floating pieces of wood. The experiment, although interesting, proved a failure, owing to the wind blowing eastward. This year the experiments are likely to begin from Palavas, a point near the place where, in 1901, the trip ended. The *Epée* is to join the balloon there on September 10. The new balloon will carry in its car a propelling petroleum engine, which, however, will be used only in the second series of manœuvres. On Sunday, August 24, M. Heureux, a young and promising aeronaut, tried on a smaller scale similar performances in the Channel. He proved by an ascent at Dunkerque that a tug-boat can conduct a balloon against a strong wind. The balloon *Alcor* was sent up in the direction of the sea and for some time was lost to view in the clouds; but, after having run some miles, the valve was opened and the balloon descended close to the waves. M. Heureux dropped his cone-anchor and waited until a tug-boat, sent out especially from Dunkerque, threw a rope to the car, by which the balloon was tugged easily and reached Dunkerque fully inflated.

#### UNIVERSITY AND EDUCATIONAL NEWS.

S. W. ROBINSON, professor emeritus of mechanical engineering in the Ohio State University, has given \$5,000 to that institution to endow a scholarship in engineering. Under the laws of Ohio this money goes into the state treasury, where it becomes a part of the irreducible debt of the state, and commands six per cent. interest, payable semi-annually.

COLUMBIA UNIVERSITY has purchased, with the fund given by Mr. Adolph Lewisohn, 50,000 dissertations presented for the doctorate at German Universities.

AN institute of pedagogy, under the auspices of the Catholic University at Washington, has been opened in New York City.

M. A. FRANCOIS MONOD has been appointed fellow by the French Department of Public

Instruction to pursue his studies at Columbia University, and it is expected that another fellow will be appointed. Columbia University will in turn appoint two fellows to carry on researches in France. The student may study science or any subject that he may select.

THE following appointments have been made in the zoological department of the University of Nebraska: Dr. Robert H. Wolcott, advanced to an assistant professorship; Mr. W. A. Willard (Harvard), who had charge of the biological work at Grinnell College last year, instructor, vice A. B. Lewis, resigned to continue graduate work in anthropology at Columbia University; Dr. R. S. Lillie, last year assistant in physiology, Harvard Medical School, instructor in physiology and histology; Mr. Geo. T. Hargitt, former assistant in biology, Syracuse University, fellow vice B. H. Ransom, who becomes assistant in the Hygienic Laboratory, Marine Hospital Service (Washington); Miss C. E. Stringer, scholar vice H. W. Graybill, who takes charge of natural science in the Columbus (Nebr.) High School; Mr. S. Fred Prince, formerly at the Missouri State Normal, as artist.

DR. RAYMOND PEARL has been appointed instructor in zoology in the University of Michigan.

SUPERINTENDENT COOLEY, head of Chicago's public schools, has declined to accept the presidency of the University of the State of Washington, which had been tendered to him.

J. W. MILLER, M.A., Ph.D. (Columbia), has been appointed instructor in mathematics and astronomy in Lehigh University.

MISS DAISY F. BONNELL, having resigned the fellowship in botany in the University of Nebraska in order to accept the position of assistant in biology in the Omaha High School, the vacancy has been filled by the appointment of Patrick J. O'Gara, B.Sc. (Nebraska, 1902), to a scholarship in botany, and George F. Miles, of the senior class, to the position of undergraduate assistant in botany.

MR. H. W. MALCOLM, M.A., B.Sc. (Aberdeen), has been appointed lecturer in physics in University College, Bristol.