

ual, and it is to be defined and investigated by these methods: 1. The examination of self as heretofore carried on. 2. The examination of allied phenomena in the healthy condition of other minds, bringing them into comparison with our own; and, 3. The examination of minds more or less diseased in the direction of their personality. He lays especial stress on the last mentioned, referring to cases where the sense of personality has been partly or wholly lost. The problems of unconscious cerebration, subliminal consciousness, and the like, must also receive due attention.

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#### SCIENTIFIC NOTES AND NEWS.

##### THE INTERNATIONAL CATALOGUE OF SCIENCE.

THE International Conference to consider the preparation of a catalogue of scientific literature by international coöperation will be held at the rooms of the Royal Society, London, beginning on Tuesday, July 14th.

The committee of the Royal Society suggests provisionally that the author and subject catalogue shall be restricted in the first instance to branches of pure science, such as mathematics, astronomy, physics, chemistry, geology, zoölogy, botany, physiology and anthropology, to the exclusion of applied science, such as engineering, medicine and the like, but that all definite contributions to pure science shall be thoroughly indexed, whether occurring in books, memoirs, etc., treating of pure science or in those devoted to applied or practical science.

The committee also recommends that there shall be a first issue of authors' titles, subject-matter, etc., in the form of slips or cards, which shall be distributed as speedily and as frequently as possible to subscribers, and that a further issue in book form shall take place at such intervals as shall be determined on, parts corresponding to the several sciences, being, if found desirable, published separately.

It is recommended that a central bureau shall be established under the control of an international council having authority over any under-

taking which may be allotted to particular countries, institutions or persons. The cost of the catalogue, in so far as it is not met by sales, should be provided for by means of a guarantee fund subscribed by governments, learned societies, institutions and individuals throughout the world, and it is estimated that the annual sum thus to be secured should be approximately \$50,000.

The conference will have to take into consideration where the bureau shall be placed, how the international council shall be appointed and organized, what language or languages shall be used and what system of classification shall be adopted. It is suggested that the decimal system of Dewey may be so amended as to be worthy of adoption.

As already stated in this journal, the delegates to the conference from the United States are Dr. John S. Billings and Prof. Simon Newcomb.

##### EXHIBITION OF THE NEW YORK MICROSCOPICAL SOCIETY.

THE Seventeenth Annual Exhibition of the New York Microscopical Society took place at the American Museum of Natural History on Tuesday evening, April 14th. The attendance steadily increasing from year to year has been a true indication of the value of this exhibition in what is usually spoken of as 'popularizing science.' The indiscriminate study of natural science often works more harm than good, especially if it be acquired through desultory and misdirected reading. Personal observation insures the safest and most lasting knowledge of Nature's acts and works. If this principle has been inculcated into the non-scientific portion of the audience, one purpose of the exhibition will have been accomplished. Persons more directly concerned and interested in scientific work also found enough to attract their attention.

The catalogue of seventy exhibits included many specimens of chemical crystals and minerals; various forms of pond life; the mouth parts of several insects, with specimens of their destructive borings in wood and other substances; drug plants and preparations of these; microscopical tests for the detection of quinine,

morphine and various poisons; the methods of studying bacteria, with complete set of cultures, apparatus, etc.; photomicrographs and preparations illustrating the structure of steel, and many other objects of interest.

At nine o'clock Dr. Edward G. Love, the President of the Society, gave a brief lecture on the use of the microscope in the examination of the fibers of various textile fabrics, fully illustrated by lantern slides. The committee of arrangements consisted of Messrs. George W. Kosmak, George H. Blake and William B. Tutthill. It seems no more than right and proper to acknowledge at this point the obligations which this and other scientific societies of New York should feel towards the Museum authorities for the many courtesies and favors shown.

G. W. K.

#### BULLETINS OF THE DIVISION OF ENTOMOLOGY.

As previously announced in these columns, with the interruption of *Insect Life*, the periodical bulletin of the Division of Entomology, U. S. Department of Agriculture, the publication of two series of bulletins was begun, the first a technical series, embodying the results of the purely scientific work of the members of the force of the Division, the second a general series of economic bearing. Of the first series two numbers have been published, the first, A Revision of the Aphelininæ of North America, by L. O. Howard, and the second, The Grass and Grain Joint-worm Flies and their Allies; a Consideration of Some North American Phytophagic Eurytominae, by the same writer. The last named publication has just appeared. It embodies descriptions of nineteen species of plant-feeding Eurytominae, fourteen of which are new. All of the species make galls in the stems of graminaceous plants, with the exception of two which feed in the seeds of Vitis. Mr. Howard rehabilitates, on structural grounds, the colorational species of *Isosoma*, established by Fitch, and decides that the species which Fitch considered to be *Isosoma hordei* is entirely distinct from Harris' species, and that the latter corresponds with Fitch's *Isosoma fulvipes*.

The general series of bulletins so far issued includes No. 1, The Honey Bee; a Manual of

Instruction in Apiculture, by Frank Benton; No. 2, Proceedings of the Seventh Annual Meeting of the Association of Economic Entomologists; and No. 3, The San José Scale: its Occurrences in the United States, with a full account of its Life History and the Remedies to be used against it, by L. O. Howard and C. L. Marlatt. The last-named is a pamphlet of 80 pages and includes a very full illustrated account of *Aspidiotus perniciosus*, particularly in regard to its eastern occurrences; the life history of the species as determined by careful indoor experiments at Washington; and a complete bibliography.

#### GENERAL.

THE sub-committee of the New York Legislature has reported to the Assembly recommending that the State Geological Survey be placed entirely under the management and direction of Dr. James Hall.

THE Council of the Royal College of Surgeons, England, has awarded the Jackson prize to Dr. A. A. Kanthack for an essay on tetanus, and the Walker prize, for the best work on cancer, to Mr. H. J. Stiles.

THE United States civil service commission will hold an examination in Washington and other cities, commencing at 9 a. m. on May 15, to fill two vacancies in the position of scientific assistant in the fish commission, the salary of one position being \$720 per annum and of the other \$1,200 per annum.

WE learn from *Nature* that a memorial has been projected in Germany to the late Prof. Hermann Hellriegel, of Bernburg, who died in September last. It is proposed to erect a monument in the churchyard at Bernburg, where the remains of the distinguished investigator are interred. An appeal for contributions has been issued, and a small committee, consisting of the President and Secretary of the Bernburg Agricultural Society and Dr. Wilfarth, Hellriegel's colleague in his researches, has been formed to carry out the details.

SENATOR CANNON, of Utah, has introduced into the Senate a joint resolution proposing the construction at Washington of a map of the United States on a scale of one foot to the mile.

It is stated that Sir Wollaston Franks, who has been an officer of the British Museum since 1851, will shortly retire from the head of the department of British and Mediæval Antiquities.

A CABLE despatch states that the Governor of Yakutsk reports officially that the inhabitants of Ust-Yansk have not heard anything about Dr. Nansen, the Arctic explorer, who was recently reported to be returning after having discovered the North Pole.

A VITASCOPE devised by Edison, and similar to the kinetoscope of MM. Lumière (see SCIENCE N. S., No. 66, p. 513), has been exhibited in a New York theater and received with much applause. A scene showing surf beating against a pier and breaking on the sand is said to have been especially successful.

THE most interesting announcement in the report of Sir A. Geikie on the Geological Survey of the United Kingdom for 1895 concerns the new general map of England and Wales on a scale of four miles to an inch. Of the total thirteen sheets, seven have been issued, five are in the hands of the engraver, and the remaining one will be shortly prepared. Experiment has been made on one of these sheets as to the comparative cost of hand coloring and color-printing; the price by the first method being 10s.6d.; by the second, 2s.6d. So far as can be judged at present, the sale justifies the expectation that the color-printing system may be continued and extended. Not only is there the advantage of a much lower price, but far greater accuracy of the maps can be insured than when each copy has to be laboriously copied by hand.

AT a meeting of the Royal Meteorological Society of London, on April 15th, Mr. E. D. Fridlander, gave an account of some observations of the amount of dust in the atmosphere made at various places during a voyage round the world in 1894-5. The experiments, which were made with a form of Aitken's pocket dust counter, showed that there are often considerable variations in the number of dust particles in a very short space of time. Not only did the dust occur in the air of inhabited countries, over the water surfaces immediately adjoining them, and up to an altitude of

6,000 or 7,000 feet amongst the Alps, but it was also found in the open ocean, and that so far away from any land as to preclude the possibility of artificial pollution, and its existence has been directly demonstrated at a height of more than 13,000 feet.

IN a letter received by the American Metric Society, G. Q. Coray, the Secretary of the Utah Metric Society, conveys the information that the metric system has been under constant agitation in Utah for nearly two years. As a result, practically every teacher, merchant and political leader is committed to the policy of adopting the system to the exclusion of all other weights and measures at as early a date as possible. The metric system has been recognized by constitutional provision, and unless Congress takes some action that will operate against the system in the near future the metric system will take the place of the old systems in the arithmetics used in the Utah public schools. The State Teachers' Association, the Legislature of Utah and the State University have forwarded memorials to Congress asking for the passage of the bill now before the House of Representatives. It is expected that the Salt Lake Chamber of Commerce will take similar action. The Utah Society proposes to send a representative to Washington to bring the merits of the system to the attention of the Congressmen. Mr. Coray states that the business men of Utah are practically a unit in favor of the movement. The Metric Society numbers over 1,000 members, and is composed largely of the business classes. The success of the Utah Metric Society naturally suggests the formation of similar societies in each of the States.

THERE will be an exhibition of horseless carriages at the Imperial Institute, London, beginning on May 9th, and at the Crystal Palace during May an exhibition will be opened for carriages of all sorts in which competitions will be arranged for horseless carriages.

THE *British Medical Journal* states that M. Duclaux, the Director of the Pasteur Institute, has made some interesting experiments on the chemical action of the sun's rays. The activity of the rays was estimated by exposing solutions of oxalic acid of known strength to their action.

The oxalic acid is converted with more or less rapidity into carbonic acid, which escapes, and at the end of the experiment the degree of acidity of the solution indicates the amount of the oxalic acid which has been decomposed, or 'burnt,' to use M. Duclaux's term. The results showed, as was to be expected, that with an overcast sky the chemical action of the sun's rays was much less than on a fine day, but beyond this they were far from concordant. With a dappled sky or with light cumulus clouds the solar combustion might be more active than with a blue sky or with a slight amount of cirrus. In a word, the apparent fineness of the body is not in any way related to its chemical activity and its hygienic power. On the whole, however, the action was greater in August than in September. This is in accordance with the experience of every photographer. As accounting partly for the discrepancies found between succeeding days both equally fine, M. Duclaux states that all essential oils and the odors sent forth into the air by vegetation diminish the actinic power of the radiations which reach the surface of the soil.

THE fourth International Congress of Criminal Anthropology will be held at Geneva, August 25-29, 1896. Application for membership should be sent to M. Maurice Bedot, Musée d'histoire naturelle, Geneva, Switzerland.

THERE has been established in Amsterdam, under the editorship of Dr. F. H. A. Peypers, a journal devoted to the history and geography of medicine.

THE Rebman Publishing Co., London, has in press a serial entitled *Archives of Clinical Skiagraphy*, edited by Dr. Sidney Rowland. The first plate will be the osseous system of a child, and five further plates, showing obscure injuries to the knee, etc., will be included in the first part.

THE *British Medical Journal* states that Dr. Edward Frankland has been asked to preside over the Toronto meeting of the British Association. It was at one time thought that the office would be accepted by the Prince of Wales, but he has decided that he would be unable to go to Canada next year.

THE *Naturwissenschaftliche Rundschau* states that the Academy of Science at Munich has awarded the Liebig gold medal to Prof. Friedr. Stohmann, of Leipzig, and the silver medals to Prof. B. Tollens, of Göttingen, and Dr. P. Soraucr, of Berlin. Prof. Tollens has also received an award of 1,000 Marks for his research on carbohydrates.

#### UNIVERSITY AND EDUCATIONAL NEWS.

MRS. LYDIA BRADLEY, of Peoria, Ill., has made known her intention of giving \$1,000,000 for a polytechnic institute in Peoria.

A BOSTON citizen whose name is withheld has given \$100,000 to establish a chair of comparative pathology in the medical school of Harvard University.

MRS. J. S. T. STRANAHAN, of Brooklyn, has given \$5,000 to the building fund of Barnard College.

THE Catholic University will build a dormitory costing about \$60,000 and accommodating about 50 students. It will be ready for use next October. There are at present no dormitories belonging to the universities. The University has received \$5,000 by the will of the Rev. Father Dougherty, of Honesdale, Pa.

It is expected that Mayor Strong will approve the bill authorizing the Board of Estimate and Apportionment to give the College of the City of New York \$175,000 a year instead of \$150,000, the amount it has received for several years.

OF the twenty-four fellowships annually awarded by Columbia University, the following appointments have been made in the sciences coming immediately within the scope of this journal: C. J. Keyser, *mathematics*; J. G. C. Cottier, *mechanics*; F. Schlesinger, *astronomy*; F. L. Tufts, *physics*; H. C. Sherman, *chemistry*; D. H. Newland, *geology*; P. A. Rydberg, *botany*; H. E. Crampton, Jr., and J. H. MacGregor, *zoölogy*; S. I. Franz and L. B. McWhood, *psychology*.

AT Bryn Mawr College Miss F. Cook has been appointed fellow in mathematics; Miss F. Lowwater, in physics, and Miss C. Fairbanks, in