

SCIENTIFIC NOTES AND NEWS.

EFFORTS are being made to collect \$50,000 to purchase for the Philadelphia Academy of Natural Science the paleontological collections of the late Professor Cope. The sum of about \$5,000 has been already received. It would be especially appropriate that these collections should be secured by the Academy, where the proceeds of the sale will be used for the foundation of a chair of paleontology.

A BRONZE bust of Maria Mitchell has been unveiled in the Observatory at Vassar College. It was cast by the Gorham Silver Company from a plaster bust made in 1877 by Miss Mary Brigham.

DR. JAMES HALL, the Geologist of the State of New York, is to sail for Europe on June 24th, to attend the coming meeting of the International Geological Congress at St. Petersburg as a representative of the State.

LORD LISTER and Professor Max Müller have been elected members of the Imperial Academy of Sciences of Vienna.

DR. EDUARDO WILD, formerly Minister of Justice and Minister of the Interior of the Argentine government and now professor in the Buenos Ayres University, is in the United States as part of an extended tour with the object of investigating educational institutions.

MR. FREDERICK L. RANSOME has been appointed Assistant Geologist in the U. S. Geological Survey.

A MEMORIAL to Joseph Thomson, the African explorer, was unveiled at his birth place, Thornhill, near Dumfries, Scotland, on June 8th. The memorial consists of a pedestal with bas-reliefs and a bust in bronze of Thomson executed by Mr. Charles McBride. It is proposed further to present a replica of the bust in marble to the Royal Geographical Society.

A COMMEMORATIVE tablet to the eminent French botanist Duchartre was, on May 23d, placed on the house at Portiragnes, where he was born in 1806.

THE Epidemiological Society of London has collected funds for a Jenner medal, the design for which has been entrusted to Mr. Allen Wyon.

KARL REMIGIUS FRESENIUS, the eminent chemist, died at Wiesbaden on June 10th. He was born at Frankfort-on-the-Main in 1818, and had been, since 1845, professor of chemistry in the Agricultural Institute at Baden.

MR. ALVAN G. CLARK died at Cambridge on June 9th, aged sixty-four years. Astronomy is deeply indebted to the senior Alvan Clark, who died in 1887, and to his two sons. In 1859 Mr. Clark began the making of an object glass eighteen and one-half inches in aperture, the largest that had up to that time been attempted. In 1873 the firm made the twenty-six-inch objective for the observatory at Washington, and in 1880 the thirty-inch refractor for the Imperial Observatory at St. Petersburg. These were followed by the thirty-six-inch lens of the Lick Observatory and the recently completed forty-inch lens for the Yerkes Observatory. The making of such lenses was a scientific work of the utmost value, and Mr. Clark had also made direct contributions to astronomy, including the discovery of the companion of Sirius in 1862, for which he was awarded the Lalande Medal of the Paris Academy.

WE also regret the following deaths: Dr. William Thompson Lusk, President and professor of gynæcology in the Bellevue Hospital Medical College, New York, and the author of many important contributions on gynæcology, died on June 12th. Mr. Richard Christopher Rapier, an eminent British engineer, died on May 28th, aged 61 years. Mr. Ney Elias, who made important geographical explorations in Asia, died on May 21st. Privy Councillor von Falke, formerly Director of the Austrian Museum of Art and Industry, died on June 13th, aged 72 years.

GINN & Co. make the important announcement that they will publish in the course of the present month the first number of *The Zoological Bulletin*, a companion serial to the *Journal of Morphology*, designated for shorter contributions in animal morphology and general biology, with no illustrations beyond text-figures. It is to be expected that there will be sufficient material for at least six numbers a year of about fifty pages each, form and style to be the same as the *Journal of Morphology*, so that articles in whole or in part can be easily

transferred in case of need. The *Journal* will be edited by Professors C. O. Whitman and W. M. Wheeler, of the University of Chicago.

Natural Science completes its tenth volume with the current number, and will hereafter be published by J. M. Dent & Co., London. *Natural Science* has undertaken the somewhat difficult task of publishing each month an extended series of anonymous editorial notes and comments. These have always been independent and interesting; indeed, the journal throughout has demonstrated that science need not be dull. *Natural Science* has given more space and more intelligent appreciation to the results of American science than any other foreign journal, and should have a large circulation in the United States.

In addition to the parties under Prince Luigi Amadio and Mr. Henry G. Bryant, now attempting the ascent of Mt. St. Elias, we are informed that a party from the London Alpine Club and the Boston Appalachian Mountain Club will carry out explorations in the Canadian Alps, with special reference to the snowfield of the Continental Divide.

PROFESSOR WILLIAM LIBBEY, with a party from Princeton University, expects to explore during July a mesa or sandstone table land near Albuquerque, N. Mex. The mesa rises from the plains to a height of more than 7,000 feet and has hitherto proved inaccessible, although it is thought to contain archæological remains.

PROFESSOR GEORGE H. BARTON finds that he is unable to accompany Lieutenant Peary this summer, and the expedition will not include the party from the Massachusetts Institute of Technology.

THE steamship *Windward* has left London for Franz Josef Land in order to bring home the members of the Jackson-Harmsworth expedition, who have now spent three winters near Cape Flora. The steamship takes with it special stores to be left at Elmwood, in case Dr. Andrée should be compelled to seek safe quarters in Franz Josef Land.

ACCORDING to Reuter's Agency, Captain Sverdrup has abandoned his original intention of exploring this year the unknown tract between Franz Josef Land and Spitzbergen. His plan

now is to go up to Smith Sound, advancing along the northwestern part of the coast of Greenland, and to spend the winter in exploring on sledges that country and the American side of the North Pole generally, thus supplementing the *Fram's* exploration of the Asiatic and European side. It is understood that Professor Mohn and Dr. Nansen approve the plan, for which an appropriation of 20,000 kroner has been asked from the State funds, the rest having been subscribed privately.

THE daily papers report, how correctly it is not possible to state, that Mr. F. W. Christian has returned to Sydney after two years spent in exploration in the South Sea Islands, having discovered ancient records, hand work and weapons that prove that the Asiatic races traded in the Islands, and that the ancient Chinese immigrated and colonized there and thus reached Central America.

MR. FREDERICK H. BLODGETT, Secretary of the New Jersey State Microscopical Society, writes us that the twenty-eighth annual meeting of the Society was of special interest. After some opening remarks by the President, Dr. J. Nelson, Dr. H. C. VanDyck explained his projection microscope for polarized light, and a series of slides was exhibited by Dr. A. H. Chester. A large number of table exhibits was shown by members of the Society.

AMERICAN physiologists, attending the meeting of the British Association at Toronto, should not fail also to be present at the Montreal meeting of the British Medical Association, which opens on September 1st. The subjects taken up for special consideration by the Section for Anatomy and Physiology are: Anæsthetics, the Teaching of Anatomy and the Causes and Modifications of Heart-beat. The President of the Section is Dr. Augustus Waller, London; the Vice-Presidents are: Drs. F. Shepherd, Montreal; T. Wesley Mills, Montreal; A. B. McCallum, Toronto; A. Primrose, Toronto, and J. B. A. Lamarche, Montreal. The Honorary Secretaries are: Drs. Robert Hutchison, J. M. Elder and W. S. Morrow.

THE thirty-fifth University Convocation of the State of New York will be held in Albany on June 28th, 29th and 30th. The subjects selected

for special discussion include science teaching, in which Professor W. M. Davis and Professor Geo. F. Atkinson will take part, and the American University with special reference to a National University at Washington.

GOVERNOR BLACK has signed the bill appropriating \$126,600 for the enlargement of the buildings of the Craig colony for epileptics.

THE new tunnel under the Thames at the East End of London, constructed under the auspices of the County Council, was opened on May 22d.

THE *American Naturalist* states that Drs. Maxwell and Swan, of Monmouth College, Illinois, propose to organize a summer school of biology, which will be probably located on the Mississippi River, not far from Monmouth.

It is said that a bill has been introduced in the Minnesota Legislature providing for the appointment of expert witnesses, and that the homeopathic physicians have, with legal advice, prepared a bill to be presented to the New York Legislature. The object of the bill is to provide a list of experts from whom witnesses are to be selected by the Court and paid by the State. The employment of expert witnesses by the counsel for the prosecution or defence has been unfortunate both for the Courts and for science. It would certainly be desirable to devise a plan by which the expert witness should be in the position of a judge rather than that of a paid attorney.

THE unfortunate relations of politics to science are illustrated by the following note from the New York *Tribune*: "Senator Elkins and Representative Dovener, of West Virginia, had a talk with the President about West Virginians. They introduced George Bowers, a candidate for Fish Commissioner, and Alexander Campbell, who wants a Deputy Auditorship. It is stated that there are numerous applicants for Fish Commissioner, but at the same time it is stated that Commissioner Brice stands well at the White House. Many prominent Republicans have requested that he be retained, and have pointed to his services as having been decidedly satisfactory. It is hinted that the President will make no change, if at all, with-

out giving thorough consideration to the idea of retaining Mr. Brice."

THE United States Civil Service Commission announces that it will hold a special examination on July 28th for establishing a register from which appointment may be made to the position of Assistant Chief in the Division of Soils in the Agricultural Department. The salary of this position is \$1,800 per annum and men only are eligible. All applicants are required to submit to the Commission, not later than July 15th, an original essay, either printed or in manuscript form, consisting of not less than 5,000 words and containing a thorough treatment of the subject 'Environment as affecting the yield, quality and time of ripening of crops.' This paper should fully cover the relation of climate, soil and other conditions to the functions of plants, with special reference to the commercial aspect of the subject. Only those applicants who submit satisfactory essays will be admitted to the remainder of the examination, which will be held on July 28th. The subjects and relative weights of the examination will be as follows:

Plant physiology.....	3
Climatology.....	2
Soils.....	2
Crops (including production and marketing).. <td>2</td>	2
Languages, German and French, (Translated into English).....	1
Essay.....	10
Total.....	20

All persons desiring to compete in this examination should write at once to the United States Civil Service Commission at Washington, D. C., for blanks and further instructions.

DR. H. CARRINGTON BOLTON recently called the attention of our readers to a patent allowed by the British office for making gold. An application for a patent to convert baser metals into gold has been made to our patent office, but it appears that the Treasury Department undertook to test the process and that the patent has so far been withheld.

WE learn from the London *Times* that the Select Committee of the House of Commons appointed to inquire into the administration of the museums of the Science and Art Depart-

ment has presented an interim report calling attention to the peril of destruction by fire to which the priceless collections at the South Kensington Museum are exposed. After describing the general character of the buildings and their inflammable structure, the report goes on to observe that the reason why the structural alterations necessary for the protection of the collections from fire have not been made appears to be that the completion of the permanent buildings has always been in the contemplation of successive governments, and the committee regard it as their immediate duty to lay before the House of Commons their very strong opinion that permanent buildings for the adequate accommodation of the collections at South Kensington should be proceeded with without delay.

A THIRD exhibition of recent geological work was opened on June 1st at the Paris Museum of Natural History. The *Times* states that England contributes some geological charts and India some meteorites. M. Schuck sends specimens of Transvaal auriferous rocks; M. le-Feuvre, Chilian nitrates; M. Chaefanjon, Central Asian rocks and Chinese coal; M. Chauvau, Madagascar gold ore, and the Dutch government a large geological chart of Java.

THERE will be held at Berlin in October an International Congress on Leprosy, to which the United States Department of State has been invited to send delegates.

THE daily papers report that the movable floor of the great dome of Yerkes Observatory fell 45 feet on May 29th. The damage is confined to the floor and the machinery immediately connected with it. The cause of the accident has not yet been announced.

IN view of the 20th annual convention of the National Electric Light Association, which opened on June 8th at Niagara Falls, the *Electrical World* gives an elaborately illustrated review of the electrical installation of the Falls. The total horse power of the Falls is estimated at about 2,500,000, of which about 52,000 will be required for the present installation. This will lower the level of the Falls by about two inches. At the present time the electro-chemical industries use 11,000 horse power, of which

the most important are those for the manufacture of aluminium, carborundum, sodium and calcium carbide.

WE learn from *Natural Science* that a large addition is being made to the Bergen Museum. To the cost, which will exceed \$40,000, the Norwegian government has contributed half, while smaller sums have been given by the municipality of Bergen and by private persons. The number of visitors to the museum was over 50,000 in 1896.

A LABORATORY of experimental phonetics has been established under the chair of comparative philosophy of the Collège de France.

THE new Medical School buildings of Guy's Hospital, London, were recently opened by the Prince of Wales. The Treasurer stated that nearly \$500,000 had already been received for the endowment fund of the hospital in answer to the appeal of the Prince of Wales.

WITH the concurrence of the Astronomer Royal, a site has been fixed in Greenwich Park for the new magnetic observatory.

IN a notice of Mr. J. B. Leiberg's report of his botanical survey of the Coeur d'Alene mountains, Idaho, in the summer of 1895 (Contrib. U. S. Natl. Herb., Vol. V., No. 1), in the current number of the *American Naturalist*, Dr. Bessey remarks: "It is interesting to note that, in spite of the fact that this report has a marked economic flavor, all measurements are metric throughout. Certainly if the United States Department of Agriculture can safely use the metric measurements in a bulletin dealing with topography, drainage, climate, mineral deposits, agricultural capacity, agricultural products, grazing lands, native food plants, utilization of water supply, forest resources, forest destruction, forest preservation, etc., botanists need no longer fear to make use of such measurements in their books, even of the most popular character."

INVESTIGATIONS by Tangl, of Budapest, which are reported on in *Pflüger's Archiv*, are of interest to those who have the management of horses. He finds that digestion proceeds more rapidly in the horse if eating is followed by active exercise than if it is followed by a period of rest. This is the opposite of what

takes place in the dog and in man, but the difference need not occasion surprise, in view of the difference in food and habits.

M. MOISSAN reported to the Paris Academy of Sciences on May 31st that, in conjunction with Professor Dewar, he had succeeded in liquefying fluorine.

WE learn from *Nature* that the British Board of Agriculture has issued an order which prohibits the importation of dogs into Great Britain from any other country (except Ireland and the Isle of Man) otherwise than in accordance with certain provisions set forth. The order takes effect on September 15, 1897. After that date no dog may be landed in Great Britain from any other country without a license from the Board of Agriculture, application for which is to be made to the Secretary of the Board.

THE maps of the Orinoco-Essequibo region of South America compiled for the use of the Venezuela Boundary Commission have been published in atlas form. There are seventy-six maps in all, of which fifteen are new and made especially for the Commission's use, while the remaining sixty-one are fac-simile reproductions of old ones selected from the large number brought to the attention of the Commission.

AN Association of Teachers of Science in Indiana was organized in 1896, and held its second meeting at Lafayette on February 26th and 27th. We learn from the *Inland Educator* that a committee consisting of Professor D. W. Dennis, Richmond, Ind.; Professor Dumont Latz, South Bend, Ind.; Professor M. B. Thomas, Crawfordsville, Ind.; Professor J. T. Scovel, Terre Haute, Ind., and Professor G. A. Abbott, Evansville, Ind., was appointed by the Association to investigate the questions discussed and report a course of science study for the high schools of the State. The questions before the committee are: What subjects should constitute a science course? How much time should be given to each? In what order should they be considered? How much laboratory work should be required? etc. The committee would be glad to hear from every science teacher and interested school official in the State in regard to these and kindred questions.

Natural Science states that Mr. A. Gibb Mait-

land, late of the Geological Survey of Queensland, has been appointed Government Geologist of West Australia, and is reorganizing the staff with the view of making a proper geological survey of the mining fields of the colony and publishing maps of the same. As a preliminary to this a topographical survey is being prepared with the assistance of a topographer. Mr. Torrington Blatchford, of the Sydney School of Mines, who has had much practical experience of mining geology, has been added to the staff. Applications have also been invited by the government for the position of Assistant Geologist; while as Mineralogist and Assayer there has been appointed Mr. Simpson of the Sydney School of Mines, late Chief Assistant Assayer to the Mount Morgan Co., Queensland.

UNIVERSITY AND EDUCATIONAL NEWS.

FIVE additional fellowships have been established at the University of Pennsylvania on the Harrison Foundation. The University now offers nineteen fellowships of the annual value of \$500 each and five senior fellowships of the value of \$800.

THE Lawrence Scientific School of Harvard University receives \$5,000 by the will of the late Miss Edith Rotch, of Boston.

A MEMORIAL scholarship of the value of \$8,000 has been given to Vassar College by Mrs. Ann Shepard, of Brooklyn.

MR. H. A. MORGAN, of the Board of Trustees of Wells College, has given the College \$30,000, covering the debt on the rebuilding of the main building in 1890.

THE Trustees of Syracuse University have contributed \$32,000 to cover the deficit in current expenses, half of this amount being given by Mr. Jno. D. Archbold, President of the Board.

THE naval authorities have decided to establish a post-graduate course at the Naval Academy for cadets intended for the construction corps, and orders have been issued directing Assistant Constructor Hobson to report for duty at the head of the department.

THE catalogue of the University of Minnesota for the year 1896 shows that there was at the University an attendance of 2,647 students, of which number 728 were women. There were 156