

out restricting its necessary and desirable use, but no methods were found free from difficulty. The technical schools teaching sanitary plumbing were commended and their extension advised, as were the professorships of sanitation in schools of architecture. Wm. Trélat's system of heating rooms and his formulation of the theory—by no means new—that heat should be radiated into rooms from warm walls, and not introduced by heating the enclosed air, were strongly approved. One method of Mr. Trélat is that of superheating the room before it is required for use, and then, by opening doors and windows, replacing the heated by cold air, thus leaving the heating to be done by radiation from the walls, and yet giving the occupants cold air to breathe. Resolutions were passed in favor of baths in schools, of cheap working-class dwellings and other social and economic improvements. The attendance was about three hundred.

#### GENERAL.

THE largest steamer yet constructed for carrying freight was launched at Wallsend, G. B., recently. The 'Westmeath' is 465 feet long, 56 feet beam,  $34\frac{1}{2}$  feet moulded depth, and can carry 10,500 tons dead weight of cargo, or 14,500 tons by measurement. The bottom is double and constructed as a system of ballast tanks. The engines are triple expansion and work at 180 pounds pressure. The hull is by Swan & Hunter, the engines by the Wallsend Engineering Co.

ENGLISH express trains between London and Glasgow and Edinburgh have for many years had schedules calling for speeds of 50 miles an hour. This has now been bettered by the London-Aberdeen express, which is scheduled to make the 540 miles in  $8\frac{1}{4}$  hours. This was accomplished by the first train a month ago, and with no apparent difficulty, making the mean speed

including stops over 63 miles an hour, and probably at times between stations on level stretches above 70 miles.

PROFESSOR SYLVANUS THOMPSON, in a letter to the *London Times*, August 1st, protests against the prejudice attributed to Lord Kelvin and others in favor of continuous currents for general use, and states that experience indicated the alternating currents to be desirable for all but electrolytic work. The obvious advantages of simplicity and relative cheapness of the latter are in no other case considered by the critic to be in any important degree compensated by continuity of current. R. H. THURSTON.

#### SCIENTIFIC NOTES AND NEWS.

SIR WILLIAM TURNER (*Journ. Anat. and Physiol.*, April, 1895, p. 424) after reviewing the famous examples of the so-called transitional forms between apes and man, and concluding that they are without exception human, gives a detailed account of Dubois' *Pithecanthropus erectus*. The fragments on which this 'genus' is founded are also thought to be human when the single molar tooth is eliminated. The author holds that, since the crown of this tooth is not worn, while all the sutures of the cranial vault are obliterated, the tooth is from another skeleton and in all probability that of an orang.

PROFESSOR D. D. SLADE has written an elaborate paper on *The Significance of the Jugal Arch*. (*Proc. Amer. Philosoph. Soc.* xxxiv., May 13th, 1895, pp. 17.) A systematic review of the elements entering into the composition of the jugal arch in the mammalia is essayed. The author invites attention to the taxonomic value of the arch in genera and families, while acknowledging that the underlying forces which it is assumed have produced the various forms yet await elucidation.

At the approaching meeting of the British Association for the Advancement of

Science, which convenes on the evening of September 4th, there will be in addition to the address of the president, Sir Douglass Galton, three public lectures, one by Professor Sylvanus P. Thompson on *Magnetism in Rotation*, one on *The Work of Pasteur and its Various Developments* by Professor Percy F. Franklin and a lecture to workingmen by Dr. Alfred H. Fison on *Color*.

THE eleventh International Congress of Americanists will meet at the city of Mexico from the 15th to the 20th of October. The meeting will be under the patronage of the President of Mexico and the most distinguished scholars and statesmen of the country. The Congress has for its object the study of the ethnography, languages and history of North and South America, with special reference to the period preceding the advent of Columbus.

THE Berlin Academy of Sciences announces that the Steiner prize (4,000 M. and an additional prize of 2,000 M.) will be awarded for a paper in continuation of J. Steiner's work on curved surfaces, which must be submitted before the close of the year 1899.

THE *Naturwissenschaftliche Rundschau* states that the 'Accademia dei Lincei' at Rome has elected as correspondents, Professor Luciani, of Rome; Dr. Stefani, of Florence; Professor v. Kolliker, of Wurzburg; Dr. Jordan, of Paris; Dr. Salmon, of London; Professor Ivanovitch, of St. Petersburg, and Professor Newcomb, of Washington.

PROFESSOR BERGH has been elected correspondent of the Paris Academy in the place of Huxley.

THE Intercolonial Medical Congress of Australasia announces its first meeting for February 3, 1896.

WITH the September number, the *American Journal of Psychology* enters upon its seventh volume. The preceding volumes (1887-1895) have been edited by President

G. Stanley Hall (Clark University). For the future, the editorial responsibility of the *Journal* will be shared by President Hall, Professor E. C. Sanford (Clark University) and Professor E. B. Titchener (Cornell University). A coöperative board has been formed, which includes the names of Professor F. Angell, Professor H. Beaunis, Professor J. Delboeuf, Dr. A. Kirschmann, Professor O. Kuelpe, Dr. A. Waller, F. R. S., and Professor H. K. Wolfe. The *Journal* will be devoted exclusively to the interests of experimental psychology (psychophysiology, psychophysics, physiological psychology, etc.). Each number will contain, as heretofore, original articles, reviews and abstracts of current psychological books and monographs, and notes upon topics of immediate psychological importance. Contributions may be addressed to any one of the three editors.

DR. THOMAS HENDERSON CHANDLER, dean of the Harvard Dental School, died on August 27th, at the age of 71 years.

A SPANISH translation of *Maize: A Botanical and Economic Study*, by J. W. Harshberger (No. II. of the monograph series issued by the botanical department of the University of Pennsylvania) has been made by Dr. Nicolas Leon, of Guadalupe, Hidalgo, Mexico.

D. APPLETON & Co's preliminary announcements for the autumn include the following publications: A new edition of the *Natural History of Selbourne*, by Gilbert White, in two volumes with an introduction by John Burroughs and illustrations by Clifton Johnson with the text and new letters of the Buckland edition, a translation of Dr. William Hirsch's *Genie und Entartung, Psychology of Number* by Dr. J. A. McClellan and Professor John Dewy, *The Story of The Earth* by H. G. Seeley, and a new and revised edition of *The Sun* by Professor C. A. Young.

EIGHTY-TWO physicians from the United States and Canada were present at the British Medical Association. The Association will probably meet in Eastbourne, England, next year.

STATISTICS have been collected by order of the German government to study the effects of the serum treatment of diphtheria. These statistics cover the first three months of 1895, and they are supplied by 232 physicians practicing in 191 hospitals. The percentage of deaths in 2,228 cases was found to be only 17.3.

THE general meeting of the *Social Science Association* is being held at Saratoga during the present week. The opening address by Dr. F. J. Kingsbury is on 'The Tendency of Men to Live in Cities.' The Association meets in the departments of Education, Health, Jurisprudence and Finance, each department having a different day set aside for the presentation of papers.

*The Critic* mentions a report that a posthumous volume of Huxley's essays will be brought out soon. It will contain most of his later writings, including a notable article finished just before his death. *The Life and Letters of Thomas H. Huxley*, edited by his son, is announced.

HENRY HOLT & Co. announce for publication in the autumn an introduction to the geological history of organisms entitled *Geological Biology* by Prof. Henry S. Williams; a laboratory companion to Remsen's 'Introduction to the Study of Chemistry,' entitled *Remsen and Randall's Chemical Experiments*, by Prof. Ira Remsen and Dr. Wyatt W. Randall; *Grasses of North America*, by Prof. W. J. Beal; a new and much enlarged edition of Prof. W. T. Sedgwick and Prof. E. B. Wilson's *General Biology*, and translations of Kerner and Oliver's *Natural History of Plants* (2d Vol.), and of Hertwig's *General Principles of Zoölogy*.

#### UNIVERSITY AND EDUCATIONAL NEWS.

PROFESSOR MARK W. HARRINGTON has accepted the presidency of the University of Washington.

GEN. J. WATTS DE PEYSTER has provided for the erection of a college of languages for the American University of Washington. The building will bear his name and a bronze statue of the donor will be erected in front of the college.

WE have received the new prospectus of elective studies of Michigan Mining School. It states that the Board of Control and Faculty of the School have unanimously decided to adopt an elective system in the institution for the future, and the prospectus is issued to explain such variations in the course of instruction as will be introduced by this change. The elective system will go into full effect on September 16, 1895.

As stated in our issue of August 9th means of attracting foreign students to the University at Paris are being considered by a Committee specially appointed for the purpose. With this object in view, according to *The Nation* the University confers this year 'diplomas d'études Supérieures d'histoire et de géographie,' which may be obtained by all students including those who have not yet taken the B. A. degree. Students at the University can thus obtain official recognition of their work after having resided at the University for a comparatively short time.

THE announcement of the department of geology and paleontology of Union University for the ensuing year is received. In the advanced work particular attention is given to the paleontology and field geology of New York. During the spring term the last two days of each week were spent in field work, and typical exposures of all the formations ranging from the Potsdam of the Cambrian up to the Catskill of the Devonian were studied. This summer Prof. Prosser is studying the distribution and classifica-