

material is almost certain to be presented among the papers read and in the discussions.

Papers were read by title in the section on 'The Law of Chance Illustrated in Railway Accidents,' by T. C. Mendenhall, and on 'Suicide,' by W. L. O'Neill. On the morning of Friday, August 30, Mr. Henry Farquhar read a paper on 'An International Coinage,' which contained arguments for such a system and reviewed the difficulties to be overcome before the system could be put in practical operation.

In the afternoon a joint session of Sections A, B, E and I was held to listen to papers on meteorology, which will be reported elsewhere in this journal.

On Monday, September 2, the first paper presented was by the Secretary of the Section, W. R. Lazenby, whose subject was 'Manual Training in Horticulture for Our Country Schools.' The author said that in the earlier educational history of this country, when the forests covered large sections of the land and people lived in log houses built by their own hands, and the school-houses were constructed in the same manner, the boys and girls grew to be men and women of great force of character and strong personality. Nothing could be more useful than manual training in horticulture to train the eye and hand, to stimulate the power of observation, to awaken an appreciation of the beautiful, in short to develop all the faculties of body and mind, which is the aim of modern education. In a paper entitled, 'Equality of Opportunity—How Can We Secure It?' J. L. Cowles argued in favor of government control of the means of communication and transportation. Mrs. Mary J. Eastman, an associate member, was invited to read a paper on 'A Cottage Settlement in Spain,' in which she advocated the extension of the university settlement idea by the establishment of model cottages.

On Tuesday, September 3, E. L. Corthell read a paper on 'The Growth of Great Cities.' He traced the growth of cities, and closed by predicting the population of some of the world's greatest cities in 1920, as based on past and present growth, and allowing for a future decrease. His predictions are as follows: Population of London 8,344,000; Paris, 3,808,586; New York, 6,337,500; Berlin, 3,422,221; Chicago, 7,797,600; Philadelphia, 1,838,160; St. Petersburg, 1,470,833. The last paper of the meeting was on 'Taxation in the United States,' by Edward Atkinson. The speaker aimed to show the necessity of carefully investigating what proportion of taxes goes to construction, to interest, etc. Other things being equal, the country that spends the most of its taxes for construction and the least for military expenses is the best administered.

SCIENTIFIC NOTES AND NEWS.

M. CH. BOUCHARD announced to the Paris Academy of Sciences, on September 2d, that he had examined the gases from three sulphurous springs in the Pyrenees. In one he found the characteristic lines of both argon and helium, in one of helium alone, and in a third helium together with an unknown substance characterized by lines in the orange and red.

At the same meeting of the Academy, M. J. Janssen reported on the work at Mont Blanc Observatory. Measurements of the force of gravity have been made at Chamonix and at the Grand-Mulets, at an elevation of 3,050 m., and it is hoped to repeat the measurements next year at the summit, if it be found possible to transport the apparatus. M. de Thierry has ascended to the summit in order to study the ozone in the air and make certain bacteriological examinations.

PROFESSOR C. V. RILEY, the entomologist, was killed by a fall from a bicycle at Wash-

ington on September 14th. We hope to give an account of Professor Riley's scientific work in an early number of this journal.

PROFESSOR E. D. COPE's important work, previously announced in this journal, will be published in October by the Open Court Publishing Company. It will be entitled *The Primary Factors of Organic Evolution*. The same publishers announce *Post-Darwinian Questions*, the second part of the late Prof. George J. Romanes's work *Darwin, and After Darwin*. With the exception of the concluding chapters, the present volume was ready for publication over two years ago, but the severe and protracted illness of Professor Romanes prevented its speedy completion. On his death, in 1894, the manuscript was placed in the hands of his friend, Prof. C. Lloyd Morgan, Principal of University College, Bristol, England, who has edited the work.

THE autobiography of Mr. Herbert Spencer is already in print, though it will not be issued till after his death.

THE Naturforschende Gesellschaft of Switzerland met at Zermatt from September 8th to 11th, and The Swiss Geographical Societies at St. Gall on September 22d and 23d.

Nature states that a memorial tablet in honor of v. Helmholtz has been affixed to the house No. 8 Haditz Strasse, Potsdam, in which he was born, and also that it is intended to erect a joint monument to the memory of Werner Siemens and v. Helmholtz in front of the Technische Hochschule at Charlottenberg.

WE have received No. 62 of the *Monthly Weather Review*, containing the annual summary for 1894. Tables and charts are given showing barometer readings, temperature, precipitation and other meteorological phenomena throughout the United States.

THE English record in railway speed

made by a run from London to Aberdeen over the London & Northwestern Railway of 540 miles in 512 minutes has been surpassed by a run on the New York Central & Hudson River Railroad on September 11th. The train ran from New York to Buffalo, a distance of 436½ miles in 407 minutes. This is an average of 64½ miles an hour as compared with the English record of 63½ miles an hour. The train on the New York Central & Hudson River Railroad was also much the heavier.

At a recent meeting of the Park Board, New York, eight bids ranging from \$319,000 to \$444,000 were received from various builders and contractors for the completion and enlargement of the new west wing of the American Museum of Natural History. The awards will probably be made in a few days.

THE *British Medical Journal* states that a quarterly court of the governors of the London Hospital was held on September 4th, Mr. J. H. Buxton, the Treasurer, presiding. In the report the House Committee stated that the amount subscribed to the Sir Andrew Clark Memorial Fund was close upon £3,000, and it had been determined to recommend the governors to adopt a scheme for the building of a female erysipelas ward and accommodation for cases needing isolation, and additional rooms for the porters. To carry that scheme into effect a further expenditure of £1,500 would be necessary, and the Board asked the governors to sanction that step.

THE Prince of Wales has accepted the presidency of the committee of the Huxley Memorial. The general committee will probably hold its first meeting some time in October.

THE Orient Steam Navigation Company, Ltd., propose to send one of their steamships of about 4,000 tons gross register and 3,000 H.P. to Vadsö in the Varanger Fiord,

Lapland (about 30° E. Long.), to enable observation to be made of the total eclipse of the sun on August 9th, 1896. The steamship starts on July 21st and is due at London on the return voyage on August 17th. The passage money is forty guineas.

It is stated that 2,000 deaths from cholera are occurring daily in Pekin. Cholera is also raging in the Russian Government of Volhynia, where the deaths are said to be about 250 a day.

ACCORDING to the *Naturwissenschaftliche Rundschau* Prof. Ernst Beyrich of Berlin has been presented with the gold 'Cothenius Medaille' by the Leopoldinisch-Carolinische deutsche Akademie der Naturforscher.

WALTER SCOTT has published *The Growth of the Brain*, by Prof. H. H. Donaldson, of the University of Chicago, as the latest volume of the Contemporary Science Series. The work will doubtless be shortly published in America by Chas. Scribner's Sons.

AN international industrial exhibition will be held at Cape Town, under the auspices of the Chamber of Commerce. The exhibition will open on November 18th and will continue for six weeks.

GINN & Co. announce a text-book on the *Elements of Plant Anatomy*, by Emily L. Gregory, of Barnard College. The book is divided into two parts, the plant cell and cell aggregates or tissues.

ACCORDING to the report of the Chief of the U. S. Weather Bureau for 1893 the total number of deaths in the United States caused by violent winds was 399, and the number of deaths caused by lightning was 209. In 1892 the deaths caused by violent wind and lightning were nearly the same, 252 and 251 respectively.

THE meeting of the German Association for the Repression of the Abuse of Alcoholic Drinks will be held this year at Munich on

September 18th and 19th. Among the papers to be presented are 'Hygiene and Temperance' by Professors Hans Buchner and Max von Pettenkofer; and 'Beer and the Alcohol Question' by Professor Moritz, of Munich.

ACCORDING to the London *Times* 320 cases of small-pox were under treatment within the metropolitan area on September 12th.

THE International Congress of Physiology opened at Berne on September 9th. Some 80 papers were on the program.

MR. H. TWEDDELL, a distinguished English engineer, died on August 23d.

M. JULES LAVERRIÈRE, a French writer on agriculture, died at Lyons at the beginning of the present month.

A TELEGRAM has been received from India by the relatives of Mr. Mummery, the famous Alpine climber, stating that he has been lost while climbing the Himalayas, and that his remains are being searched for.

THE deaths are reported on August 26th of Dr. Frederick Miescher and Dr. Ernst de Sury, professors of physiology and of legal medicine, respectively at Bâle, and of Dr. Moritz Willkomm, professor of botany in the German University at Prague.

UNIVERSITY AND EDUCATIONAL NEWS.

THE faculty of Harvard University has sent to the corporation a proposition to establish 'docents' similar to those in the German universities. The men thus designated would be holders of the degree of Ph. D. who might offer advanced courses to graduate students without being paid for their work by the University.

MR. MELVIL DEWEY, Secretary of the University of the State of New York, has sent out a circular letter stating that Mr. Asa O. Gallup, who has so efficiently discharged the duties of chief clerk for the