

detic Commission, and gives an extended trial series of observations which he has made with it. The instrument is used like an ordinary zenith telescope, except that the stars are allowed to trail across a photographic plate in the focal plane, instead of being bisected with the usual filar micrometer. The distance between the trails can then be measured under a microscope. For the determination of the scale-value Dr. Marcuse uses Pleiades trails, and for the Pleiades stars adopts places based on the Yale triangulations of Elkin and the photographic observations made at New York by Rutherford. Dr. Marcuse finds as the result of the whole research that the photographic method is capable of about the same precision as the visual method. The output of work seems to be about the same for the two methods also; and in this respect the zenith telescope would seem to be an exception. For in most other applications of photographic astrometry the great advantage of the photographic method has been found to be the immense saving of labor permitted by it.

WE have received the first volume of the *Annals of the Strassburg University Observatory*. It is a large quarto containing xcvi. and 340 pages. After a description of the new observatory, there follows an elaborate investigation of the Repsold meridian circle and the observations made with it between 1882, March 15, and 1886, September 9. The volume closes with a series of plates illustrating the construction of the meridian observatory. The next volume is stated to be in course of publication, and will contain a definitive catalogue of stars derived from the Strassburg meridian observations.

THE Observatory of the University of Virginia has issued Part 7 of its publications, containing observations of the nebula in Orion, by Ormond Stone.

THE second part of the proceedings of the 1895 meeting of the International Geodetic Commission has been issued. It contains the usual reports upon the present condition of geodetic work in Europe.

H. J.

SCIENTIFIC NOTES AND NEWS.

M. AUG. LUCIEN TRÉCUL, botanist, member of the Paris Academy, died at Paris on October 15th, aged 78 years.

WE regret to notice, among other recent deaths of men of science abroad, those of Dr. R. E. Kerry, director of the bacteriological laboratory of the Vienna Veterinary Institute, at the age of 34; of Dr. Eugen Sell, associate professor of chemistry in the University of Berlin and director of the chemical laboratory of the Imperial Health Office, on October 13th, at the age of 54; of Dr. Julius Theodor Wolff, astronomer at Bonn, on October 11th, at the age of 70 years; of Dr. E. Czerkawski, formerly professor of philosophy at Lemberg, on September 21st, at the age of 74, and of Dr. Saul Kowner, formerly medical director of the Njeschin District Hospital (Russia), author of a work on the philosophy of Spinoza and of a history of medicine, in three volumes, aged 58.

WE regret to record the death of Dr. H. Newell Martin, which occurred at Burley, England, on October 29th. Martin was born, in 1848, in Newry, Ireland. He studied at University College, London, and received the degrees of B. S. in 1870, of M. B. in 1871, and of D. Sc. in 1872. From the University of London he went to Christ College, Cambridge, where he took the degree of B. A. in 1874, and that of M. A. in 1877. He became a fellow of his college, and lecturer on natural history. On the organization of the Johns Hopkins University, in 1876, Martin, on the recommendation of Huxley, was made professor of biology, and retained this office till 1893, when his health became impaired. Martin belonged to the faculty of the Johns Hopkins University when its six or seven members gave the University its great reputation and trained a large part of the American students now engaged in university teaching. Martin did his

full share in the accomplishment of this work. His lectures were admirably clear, and by teaching and example he greatly stimulated his students in original research. His own work on the physiology of the heart and in other directions is well known. His friends and former students published recently a collection of his scientific papers and addresses, which we hope to review shortly in this JOURNAL. Only a month ago we called attention to the revised edition of 'The Human Body,' and stated that "the book remains the best compendium we have covering the anatomy, physiology, psychology and hygiene of the human body." Martin's untimely death is in every way a cause for deep regret.

THE Association of American Agricultural Colleges met in Washington, D. C., on November 10th, 11th and 12th.

THE annual convention of the American Society of Mechanical Engineers will be held at the house of the Society, 12 West Thirty-first street, New York City, from December 1st to 4th.

THE Bradshaw Lecture, by Dr. W. R. Gowers, on 'Subjective Sensations of Sound,' was delivered before the Royal College of Physicians of London on Thursday, November 5th.

THE comet medal of the Astronomical Society of the Pacific, founded by Joseph A. Donahoe, has been awarded to M. Giacobini, of the Observatory at Nice, France, for his discovery of an unexpected comet on September 4, 1896.

MR. J. WOLFE BARRY gave his presidential address to the London Institution of Civil Engineers on November 3d.

DR. LUDWIG REH, of São Paulo, Brazil, has been appointed permanent assistant to the Concilium Bibliographicum, Zurich.

THE Academy of Sciences at Budapest has received a bequest of 10,000 fl. from the late D. P. Von Palast.

It is proposed to raise the subscription to the Physical Society, of London, and that hereafter members shall be known as 'fellows.'

THE lecture of M. Moissan before several of the scientific societies of New York, on October 27th, was followed with great interest by a

large and representative audience. Even those unable to understand French appreciated the experiments with the electric furnace, showing the artificial production of diamonds and the volatilization of silica.

DR. FELIX KLEIN has been the guest of the faculty of the University of Pennsylvania. The graduates from Göttingen who reside in Philadelphia gave him a dinner, and he was also entertained by the Mathematical Club.

Popular Astronomy states that Prof. Winslow Upton, of Ladd Observatory, Brown University, is now at Harvard College Observatory, at Arequipa, Peru, engaged in making latitude and longitude observations. Mr. DeLisle Stewart, a graduate of Carleton College, is now one of the regular observers in the Observatory. He is engaged largely in photographic work, the photographs being sent to Harvard Observatory.

DR. L. SERRURIER, director of the Ethnographic Museum in Leiden, has resigned because the state will not rebuild the museum building.

THE Flower Astronomical Observatory of the University of Pennsylvania has been completed and will be used at once by graduate students. It is well equipped with instruments, the lenses of which were made by Brashear and the instrumental parts by Warner & Swasey. The Flower Observatory is outside the city, but a working observatory, for the benefit of the undergraduates taking the college course in astronomy, has been erected near the other university buildings. This building will be equipped with a transit instrument, zenith telescope and a four-inch equatorial—the gift of Horace Howard Furness, Jr.

A DESPATCH from Madrid says that the town of Huelva, in the province of that name, has been swept by a tidal wave from the Atlantic Ocean. No details are given, but the report says it is known that the loss of life has been great. The steamer Carthegena was overwhelmed by the great wave and most of the persons on board were drowned. Huelva is a town on an inlet of the Atlantic, forty-nine miles west, northwest of Seville. The population of the town is about twelve thousand.

A MUSEUM of natural history, geology, archaeology and technology is proposed (says *Natural Science*) for Hertfordshire, and a site near St. Albans has been offered by Lord Spencer, upon certain conditions. A sum of at least £5,000 must be raised for building and endowment, and the museum is to be in the hands of the County Council. We are glad to see that a curator is thought of as much importance as a building. A provisional committee has been appointed, including Lord Cowper, Sir John Evans and the Hon. Walter Rothschild.

ACCORDING to *Die Natur*, a Congress for astronomers of all nations, met at Bamberg on September 17th. There were present thirty foreign members, including Father Hagen, of the Georgetown Observatory, who described his Atlas of Variable Stars, which is now in press; papers were also read by Prof. Bauschinger, the new director of the Astronomical Bureau of Calculations at Berlin; Prof. Schur, director of the Göttingen Observatory, and others. The next Congress will meet at Budapest, 1898.

A NOTE in the N. Y. *Evening Post* (quoting from an account in the London *Times*, of a report of Mr. Gosselin, of the British Embassy in Berlin) states that the authorities in German East Africa have put into force a series of regulations intended to check the indiscriminate slaughter of elephants and other big game. These rules, promulgated at Dar-es-Salaam, provide that every hunter must take out an annual license, for which the fee varies from five to 500 rupees. The shooting is prohibited of all young game—calves, foals, young elephants, either tuskless or having tusks under three kilos, and of all female game, if recognizable. Further, in the Moschi district of Kilimanjaro, no one, whether possessing a license or not, is allowed without the special permission of the Governor to shoot antelopes, giraffes, buffaloes, ostriches or cranes. Those who are not natives have to pay 100 rupees for the first elephant killed and 250 for each additional one, and 50 rupees for the first rhinoceros and 150 for each succeeding one. Special game preserves are also to be established. Major von Wissmann suggests that the station authorities should endeavor to domesticate zebras (espe-

cially when crossed with muscat and other asses and horses), ostriches, and hyena dogs crossed with European breeds. It is thought that the best means of preventing the extermination of elephants would be to fix by international agreement among all the powers on the East African coast a close time for the animals, and to forbid the exportation or sale of tusks under a certain size.

UNIVERSITY AND EDUCATIONAL NEWS.

By a decision of the University of the State of New York the degrees B. A. or A. B. and Ph. D. shall not, in the State, be conferred *causa honoris* after January 1, 1897.

THERE are 107 students in Wellesley College taking a course in geology which extends through the entire year. The course is given by Prof. Wm. H. Niles and Miss Elizabeth F. Fisher.

It is proposed to build next year a laboratory of hygiene for the veterinary school at Berlin. Dr. Ostertag has been appointed to the chair of hygiene.

WOMEN have not been able to study medicine in Russia since 1882. Widely signed petitions, asking for the admission of women to the universities, have not been granted, but the Czar has sanctioned a decree creating a medical school for women in St. Petersburg.

SOME months ago the Bellahouston Trustees promised to the Glasgow University a donation of £12,500 towards the foundation of an engineering laboratory, provided that a similar sum was obtained by private subscriptions or otherwise. To fulfil this condition a committee was formed, and the Glasgow correspondent of *The Lancet* learns that nearly the whole of the sum required has been raised, so that the erection of the new laboratory will be commenced in the coming spring.

PROF. SCHENK has been promoted to a full professorship of anatomy in the University at Vienna, and Dr. London, of the University of Breslau, to an associate professorship of mathematics. Dr. Kippenberger, Privatdocent at Jena, has been called to the professorship of chemistry in the medical school at Kairo.