SCIENTIFIC NOTES AND NEWS.

Dr. A. C. Lane has been appointed State Geologist of Michigan in succession to Dr. L. L. Hubbard.

Professor F. L. O. Wadsworth has resigned his position on the staff of Yerkes Observatory.

A BRONZE tablet, placed by the Corporation on the house in Bath in which Sir William Herschel once lived, was unveiled on April 22d. Sir William Ball made an address, in the course of which he stated that it was in the back garden of this house that the planet Uranus had been discovered and many other important astronomical observations had been made.

THE death is announced of Dr. Friedrich Karl Christian Ludwig Büchner. He was born in 1824 and after practicing medicine became docent at Tübingen, from which position he was dismissed in consequence of the materialistic doctrines in his book on 'Matter and Force,' published in 1865. Thereafter he practiced medicine at Darmstadt. Büchner was well known for his series of popular works on physical science and the theory of evolution, as well as for numerous contributions to physiology, pathology and other sciences.

Professor Charles Friedel, the eminent French chemist, has died at the age of sixty-six years. Born at Strassburg, he studied chemistry in Paris under Wurtz and became a curator of mineralogy in the School of Mines and in 1884 professor of organic chemistry at the Sorbonne. He was elected member of the Paris Academy in 1878, succeeding Regnault. He made important contributions to organic chemistry and was much interested in applications of chemistry to the arts.

MR. JAMES HOGG, a well-known London ophthalmic surgeon and writer upon scientific topics, died in London on April 23d, aged 82 years. In addition to numerous publications on diseases of the eye he wrote many books, including 'A Manual of Photography' (1845), 'A Manual of Domestic Medicine' (1848), English Forests and Forest Trees' (1853), 'Experimental and Natural Philosophy' (1854), 'The Microscope, its History, Construction and Applications' (1854, the 15th edition 1898),

'Colour Blindness' (1863), 'Boarding-out of Pauper Children' (1870), 'Microscopic Examination of Water' (1874) and 'Arsenical Wall Paper Poisoning' (1879-89).

Professor G. C. Swallow, who has been State Geologist of Missouri and Kansas and professor in the University of Missouri, died on April 20th, at the age of 82 years.

WE regret also to record the following deaths: Dr. Rijke, professor of natural history, at Leiden, at the age of 85 years; the botanist Dr. Gremley, at Egelshofen, aged 66 years; Surgeon-Major Dr. C. C. Wallich, aged 83 years; Graf Abbé Castracane at Rome; Dr. L. v. Babs, sometime professor of chemistry at the University of Freiberg, aged 80 years; Dr. M. D. Lwow, professor of chemistry in the Institute of Technology in St. Petersburg, and Mr. Joseph Wolf, the naturalist and illustrator of many important English works on natural history.

THE Cambridge Anthropological Expedition under Dr. A. C. Haddon has arrived at Singapore on its way to England.

MR. EDWARD H. HARRIMAN, of New York, has invited a number of scientific men to accompany him as his guests on an expedition to-Alaska. The party will leave Seattle about the end of May, on a large steamer chartered and fitted up specially for the expedition. They expect to take the 'inside passage' route to Lynn-Canal, and then, after visiting Sitka, proceed westward along the coast to Yakutat Bay, Prince William Sound, Cook's Inlet and Kadiak Numerous places will be visited which are out of reach of ordinary travelers, and stopswill be made to admit of scientific work. Steam launches, tents, camp outfit, packers and so on have been bountifully provided, so that the largest amount of work may be done in the shortest time. Among those who have accepted Mr. Harriman's generous invitations to go on this expedition are Professor William H. Brewer, of Yale; John Burroughs, the wellknown writer; F. V. Coville, Botanist of the U. S. Department of Agriculture; Dr. William H. Dall, of the Smithsonian, who has already visited Alaska 13 times; W. B. Devereaux, Mining Engineer; D. G. Elliott of the Field Columbian Museum, Chicago; Professor B. K. Emerson, of Amherst; Professor Bernard E. Fernow, Dean of the School of Forestry, Cornell University: Dr. A. K. Fisher, Ornithologist U. S. Biological Survey; Henry Gannett, Chief Geographer U. S. Geological Survey; G. K. Gilbert, Geologist U.S. Geological Survey; Dr. George Bird Grinnell, editor Forest and Stream; Charles A. Keeler, Custodian of the Museum of the California Academy of Sciences; Dr. C. Hart Merriam, Chief U. S. Biological Survey; Dr. Lewis R. Morris, of New York; Robert Ridgway, Ornithologist U.S. National Museum; Professor W. E. Ritter, of the University of California, and Professor William Trelease, Director of the Missouri Botanical Garden. In addition to these men of science and their assistants, two artists accompany the expedition. the landscape artist R. Swain Gifford, of New York, and the bird artist Louis Agassiz Fuertes, of Ithaca.

MR. RUSSELL W. PORTER writes that he will conduct, during the coming summer, an expedition under the auspices of the Peary Club, the main object of which is to communicate with The steam-bark whaler Lieutenant Peary. Hope will leave Sydney, Cape Breton, about July 15th. She will then go directly north, through the Gulf of St. Lawrence, up the Labrador coast, through Baffin's Bay, to the west Greenland coast, stopping probably at Upernavik, and then enter Melville Bay. After passing through Melville Bay the ship enters Whale Sound, where she will cruise until communication is made with Lieutenant Peary or his Eskimo representatives. The expedition will reach Sydney on its return at the end of September. The party will be limited to six and there is at present one place vacant. intended primarily for hunting, the expedition will afford an excellent opportunity for work in natural history. Any man of science who would like to join the party should communicate with Mr. Russell W. Porter, 6 Beacon St., Boston.

A STATE Bacteriological and Pathological Laboratory has been established for Delaware. Professor Chester, State Bacteriologist, has been appointed director.

WE learn from the American Geologist that

the State of Wisconsin has appropriated the sum of \$100,000 for two years to carry on the new geological and natural history survey of the State, of which Professor A. E. Birge, of the University of Wisconsin, is director.

THE Liverpool School of Tropical Medicine was formally opened on April 22d by Lord Lister. A visit was made to the Tropical Diseases ward in the Royal Southern Hospital and to the Thompson-Yates laboratories, and a banquet was given in the evening, at which Lord Lister made the principal speech.

DR. GEORGE BRUCE HALSTED has been invited to present a Report on Progress in Non-Euclidean Geometry at the coming Columbus meeting of the American Association for the Advancement of Science.

THE Paris Society of Biology has awarded its Godard prize for the most important contribution to biology to Dr. Vidal, of Périgueux, for his memoir on the influence of chloroform on nutrition.

THE Lenval prize for an improvement in the treatment of deafness will be awarded at the International Otological Congress that will meet in London from the 8th to the 11th of August next.

THERE will be a Civil Service examination in the State of New York on May 27th for the position of Assistant in Dietary Experiments, Lunacy Commission, at a salary of \$100 per month. The duties are to assist in the experiments being conducted by Professor W. O. Atwater with a view to the establishment of scientifically correct rations and dietary for the State hospitals. The examinations will relate to the experience and training of candidates and their knowledge of and ability to conduct scientific experiments of the kind indicated.

THE French Chamber of Deputies has appointed a committee to take into consideration the application of the decimal system to the measurement of time. The Society of Geography at Toulouse began to agitate the question in 1893 and has been especially active in the matter. It may be remembered that the Convention which adopted the decimal system applied it to time and it was actually used by the French government in the year 1794.

THE more important departments of the Russian government have approved the reform of the Russian calendar urged by the St. Petersburg Astronomical Society, and will adopt at an early date the system followed by the rest of the civilized world.

THE International Bureau of Weights and Measures has been holding its sessions at Paris. Among the foreign delegates in attendance were Professors Michelson, from the United States; Cheney, from Great Britain; Tahlen, from Sweden; Blazema, from Italy; Hirsch, from Switzerland; Hepiter, from Austria; Foerster, from Germany, and Mendeljev, from Russia.

THE American Society of Mechanical Engineers is holding its spring meeting at Washington as we go to press. Rear-Admiral George W. Melville presides, and about 600 members have signified their intention of being present.

THE American Climatological Association holds its sixteenth annual meeting at the building of the Academy of Medicine, New York City, on May 9th, 10th and 11th.

THE American Library Association is meeting during the present week at Atlanta, Ga.

EXPERIMENTS were made recently at the South Foreland to demonstrate the possibilities of communicating between a moving ship and According to the London Times, the land. Signor Marconi joined the French commission on board the despatch vessel Ibis. The receiving and transmitting instruments on board the *Ibis* were in a cabin, the wire to take the current being connected with the instrument room from the top of the mast, about 150 feet high. The messages were transmitted to the *Ibis* from the South Foreland, from Wimereux, and from the East Goodwin lightship, as also from the gunboat to each of these points, and in each instance they were recorded with unerring distinctness, the French commissioners expressing the greatest satisfaction with the system. Hitherto one of the chief objections raised to wireless telegraphy has been that it is impossible to concentrate the current—in other words, to 'cut out' and prevent the message from being received at other stations where installations exist within an equal radius other than the one for which it was originally intended.

Signor Marconi has now discovered an ingenious but simple arrangement by which this difficulty can be overcome, and it was tested before the French commission and at the South Foreland. Messages were first sent from the *Ibis* to the South Foreland, and, as Professor Fleming pointed out on his recent visit, were received simultaneously by the Goodwin lightship. Signor Marconi's new invention was then tried, and the messages sent to the Foreland were concentrated there and received at no other point, the lightship being cut out. A similar experiment was made with the lightship, the ships communicating with each other, while the Foreland was cut out. As a further test of this important invention messages were sent simultaneously from Boulogne and the lightship to the South Foreland, where only the Boulogne message was taken by the receiver, the other being cut out at will. This experiment was also tried on board the Ibis and from the other points, in each instance with complete success.

Reuter's Agency states that Dr. Sven Hedin will start from Stockholm at the end of June on a new expedition to Central Asia, and will travel direct through Russia and Turkestan to Kashgar, taking a new route over the mountains. Dr. Sven Hedin will conduct the expedition alone, being accompanied only by his old Asiatic servant, Islam Bai, from Osh. He has received permission from the Czar to take two Cossacks as escort. On reaching Kashgar Dr. Sven Hedin will proceed in an easterly direction for the purpose of making fresh investigations in Chinese Turkestan, where he hopes to find further antiquities. Thence he will visit the unexplored Lob Region, and will cross the great Sand Desert by more than one route. After going to Tibet and exploring that portion of the country to the south of his former route, he will return via India. As in the case of his famous journey across Asia, Dr. Sven Hedin's objects on this expedition are purely scientific. The difficulties to be expected are of much the same character as those experienced during his former trip. Dr. Hedin is, however, better prepared than he was on that occasion, and hopes to achieve even better results than he did then. The expenses of the expedition, which

will amount to £2,000, have been defrayed by King Oscar, Mr. Emanuel Nobel and others.

THE Brussels Geographical Society has received the first report of Lieutenant Gerlache, commander of the Belgian Antarctic expedition. According to the London Times the report says that the expedition left St. John's Bay on January 14, 1898, and on the 21st explored the South Shetland Islands. On January 15th, in 55° 5' south latitude and 65° 19' west longitude, soundings to the the depth of 4,040 mètres were taken. The Belgica left on the 23d for Hughes Bay, discovering a strait separating the lands of the east from an unknown archipelago. The land to the east was named Danco Land. Magnetic observations were made and interesting botanical, geological and photographic results were obtained. On February 13th the Belgica went in the direction of Alexander I. Land, exploring the belt of bank ice towards the west. On March 10th the ship became fast in the ice in latitude 71° 34′, longitude 89° 10′. The sun disappeared on May 17th, and there was continual night until July 21st. M. Danco died on June 5th, and his remains were deposited in a tomb of ice. The Belgica, after leaving her winter quarters, again became fast in the ice in 103° west longitude. She reached open water on March 14th. The expedition made successful magnetic and meteorological observations and obtained collections of pelagic and deep-sea fauna and samples of submarine sediments. On February 26th Black Island was explored, and on the following day the Belgica entered the Cockburn Channel, arriving at Punta Arenas, in Patagonia, on the 28th of last month.

THE ranchmen of Seward County, Kansas, says the *Electrical World*, have connected their ranches by telephone facilities, using the barbwire fences instead of setting poles and stringing wires. It had been demonstrated that a fence wire worked perfectly for a telephone connection. The scheme was favored by the stockmen, and a local company was formed, with headquarters at Liberal, that being the nearest telegraph point. Lines have been conconstructed and are in operation, extending from Liberal over the whole of Seward, Stevens and Morton Counties, Kansas, and have reached

out into Beaver County, Oklahoma, and Hansford County, Texas. Many of the ranches in in this grazing country are situated miles from railroad and telegraph facilities.

The first stone of the oceanographic museum at Monaco was laid on April 26th by the Bishop in the presence of Prince Albert, Princess Alice and the Crown Prince. Count Münster, on behalf of the Emperor William, spoke of the museum as a pledge of peace and amity among peoples, while Admiral Brown de Colstoun, on behalf of France, congratulated the Prince on The Prince expressed his maritime researches. his thanks to the German Emperor and President Loubet for sending representatives to the ceremony. As we stated recently, the museum has been founded by the Prince of Monaco for the exhibition and study of the collections made under his auspices.

A TELEGRAM has been received at the Harvard College Observatory from Professor J. E. Keeler at Lick Observatory, stating that comet Tempel was observed by Perrine, May 6, 9077 Greenwich mean time in R. A., 18^h 52^m 57^s.8 and Decomber 4° 32′ 19″, Faint. This is an observation of comet Tempel, 1873 II., and not 1866 I., which is connected with the meteoric swarm of November 13th. An ephemeris was published by Schulhof in Astron. Nach., Vol. 149, p. 23, which agrees within a few seconds of the position given above.

UNIVERSITY AND EDUCATIONAL NEWS.

THE great State Universities of the Central and Western States are continually growing in wealth and influence. During the present year the following additional endowments are reported: An appropriation bill recently passed by the Illinois Legislature gives to the University of Illinois about \$600,000. The Wisconsin Legislature has appropriated for the University of Wisconsin \$151,000, of which \$100,000 is for an engineering building. The Colorado Legislature, besides passing a bill giving its State University an income of one-fifth of a mill on each dollar of assessed valuation, has made appropriations amounting to about \$110,000. In Nebraska the State University has been