

that appeals to the whole world of science ; it will have to be supported by money ; it will require the ardent cooperation of numerous individuals. To say the very least, it is not wise of the Royal Society to put on its usual airs of superiority and indifference in a matter of this kind. We have excellent reason for believing that the eminent and courteous Secretaries of the Royal Society are not responsible for this darkness where there should be light. Who, then, is the culprit?"

SCIENTIFIC NOTES AND NEWS.

MRS. ESTHER HERRMAN has given \$10,000 to the building fund of the Scientific Alliance of New York City. It will be remembered that about a year ago we gave an account of the plans for erecting a building for the different scientific societies of New York. Such a scientific center is greatly needed, and it is to be hoped that Mrs. Esther Herrman's generous gift will be followed by others.

MR. EDWARD E. AYER has resigned the presidency of the Field Columbian Museum, Chicago. A successor has not yet been elected.

PROFESSOR A. E. TÖRNEBOHM has been elected President of the Swedish Geological Society for 1899.

MR. W. ANDERSON, of the Geological Survey of India, has been appointed director of a survey of Natal about to be undertaken by the Colony.

THE Academy of Science of St. Petersburg has elected as honorary members the King of Sweden, the Queen of Roumania, Fridjof Nansen and M. Émile Sénart, member of the Institute of France.

M. A. LOREAU, President in 1898 of the French Society of Civil Engineers, and Count A. de Dax, Secretary of the Society, have been made by the Emperor of Russia a commander and a knight, respectively, of the order of St. Stanislas.

MR. R. T. BAKER has been made Curator of the Technological Museum of Sydney, N. S. W.

THE death is announced of Dr. Dumontpallier, an eminent Paris physician and an author of contributions to pathology, especially of the nervous system, at the age of 74 years ; and of

Lieut.-Col. Robert Pringle, M.D., of the British army, the author of numerous papers on the hygiene and diseases of India.

WE learn from the *Botanical Gazette* of the deaths of three foreign botanists, M. F. Gay, of the University of Montpellier, at the age of 40 years, a student of the green algæ, Pastor Christian Kaurin, of Sande Jarlsberg, Norway, at the age of 66, a well-known student of Scandinavian bryology, and Professor T. Carnel, professor of botany and director of the botanic garden at Florence.

THE *London Times* gives the following details concerning the Rev. Bartholomew Price, F.R.S., whose death we recently recorded : Born at Cole St. Dennis, Gloucestershire, in 1818, Mr. Price was educated privately and at Pembroke College, whence he obtained a first class in mathematics in 1840. He gained the University Mathematical Scholarship in 1842, and two years later was elected Fellow of his College. In 1844 he became tutor and ten years afterwards Sedleian professor of natural philosophy. In 1852 appeared the first volume of his elaborate work on the infinitesimal calculus ; the last of the four was not published till ten years later. This book obtained for him a considerable reputation in the mathematical world ; but his principal work in life was practical, and he will be remembered rather as the active Secretary of the University Press during the years of its first great activities after the death of Dean Gaisford, than as a mathematical professor. Bartholomew Price was a keen yet cautious man of business, and in his best days did much for the interests of the University both at the Press and as member of the Hebdomadal Council. Probably nobody of his time filled the latter post during so many years as he, or was so often called upon to be the spokesman of the Council in proposing new statutes and decrees to Congregation.

WE learn from *Natural Science* that at a meeting in Edinburgh, on November 8th, a committee was appointed to consider the feasibility of establishing a Scottish Zoological Garden. "The idea of a 'Zoological Society' was mooted, but did not, we are pleased to learn, find support. There are already three or four societies

in Edinburgh which have to do with Zoology, and any attempt to insinuate another would simply alienate the sympathies of those who would be glad to see a well-considered Zoological Garden instituted. A committee, including Professor Cossar Ewart, Dr. Ramsay Traquair, Professor A. E. Mettam, Mr. Fairgrieve, Mr. W. S. Bruce, Mr. Hope Findlay and others, was appointed, and we wish them success. We venture to predict that a successful site is to be found in the direction where holidayers do most resort. Proximity to the sea would also be a great advantage. We hope the enthusiasts and the capitalists may come to terms, and that more may soon be heard of this excellent scheme."

At the recent annual meeting of the New York Academy of Medicine both the retiring President, Dr. E. G. Janeway, and the incoming President, Dr. William H. Thomson, advocated the establishment of a research laboratory in connection with the Academy. The library of the Academy now contains 70,360 books, being one of the most extensive medical libraries in the world.

THE Chelsea Physics Garden, established in 1721 by Sir Hans Sloan, at present forms the site of the garden and buildings of the Society of Apothecaries, occupied by them at a nominal rent of £5, on condition that the garden be maintained for the purpose of botanical and medicinal study, and supply the Royal Society with specimens of fresh plants every year. The Society wishing to be relieved of the trust, the London County Council has drawn up a plan for its further maintenance. The scheme provides that the City Parochial Foundation, which is prepared to make a grant of a capital sum and a *maximum* yearly amount of £800 for maintenance, shall be the trustees. It is proposed to provide a museum, a lecture theatre, a botanical laboratory and a biological laboratory, partly in the existing buildings and partly in new buildings, which, it is anticipated, will encroach on the garden to the extent of only one-eighth of an acre. The trust is to be administered by the trustees and by a committee of management that will include representatives from the Royal Society, the Royal College of

Physicians and other institutions. Provision is made for the appointment of a Curator and other officers.

THE New England Association of Chemistry Teachers held their first annual meeting at Boston on January 28th. The following officers were elected: President, Dr. Lyman C. Newell; Vice-President, Rufus P. Williams, of Boston; Secretary, M. A. Stone, Watertown; Treasurer, E. F. Holden, Charlestown; Executive Committee, William H. Snyder, Worcester, Miss Delia M. Stickney, Cambridge, and Charles R. Allen, of New Bedford. The Association now numbers 49 members.

THE centennial anniversary of the Medical and Chirurgical Faculty of Maryland will be celebrated in Baltimore, April 25th, 26th and 27th.

A NUMBER of cases of bubonic plague have occurred on the Island of Mauritius.

DR. CARL PETERS has left London with a well-equipped expedition to explore the African territory south of the Zambesi River with a special view to the discovery of gold.

Natural Science states that Sven Hedin is classifying his geological specimens, which he will present to the High School of Stockholm, and is preparing a detailed account of his journey from Kathgar to Khotam for *Petermann's Mittheilungen*. His archæological collection and manuscripts will be arranged by Professor Grunwedel and exhibited in the Berlin Museum, whilst Dr. Ekholm is dealing with the meteorological notes. The maps and charts, covering 552 sheets, have been confided for enlargement and reproduction to Justus Perthes, of Gotha. Dr. Hedin proposes to start on his next journey of Asian exploration about the middle of 1899. He intends to cross the Taklamakan desert twice, thoroughly explore one of the largest rivers of Turkestan, and again study the interesting Lob Nor problem. The most important part of the work will, however, be explorations in the north and interior parts of Tibet. Dr. Hedin hopes to be able to spend a winter in some of the highest alpine regions of Tibet at a height of about 15,000 feet. Then he will pay a visit to the new Viceroy of India, and will return over Himalaya, Karakoram and Kashgar. Dr. Hedin will again go alone, and

he calculates that his three years' travel will cost no more than £2,500.

It is proposed to establish in University College, Liverpool, a class for students who will devote themselves to the investigation of tropical diseases, to which end a special lecturer will be appointed, and the students will have the advantage of watching cases and their treatment in the Royal Southern Hospital. Mr. A. L. Jones, well known in the West African trade, has offered to contribute £350 a year towards the expenses of the intended special school. A general committee has been formed, which, in conjunction with a committee of the Royal Southern Hospital, will make adequate arrangements for the work in new buildings to be erected for the hospital.

At a meeting of the central committee for establishing sanatoria for consumptives on January 9th, says the *London Times*, it was stated in the annual report that there were already 20 sanatoria in Germany for consumptive patients. Regret was expressed that accommodation was chiefly provided for male patients, and attention was called to the urgent necessity of establishing sanatoria for women. A committee of ladies under the presidency of Princess Elizabeth zu Hohenlohe had carried on a good work in providing for the families of those who, as patients in the sanatoria, were debarred from earning their living. A large number of towns and also of provincial districts throughout the Empire had, through their representatives, given their adhesion to the central committee, which now numbered 466 members. At the close of the year 1898 the funds amounted to 250,000 Marks. A sum of 224,500 Marks had already been devoted to subsidizing new sanatoria, and 70,000 Marks had been promised for the same purpose. The Duke of Ratibor, the nephew of the Chancellor, made a statement regarding the congress on tuberculosis, its dangers and its prevention, which will meet in Berlin at Whitsuntide under his presidency. Invitations to attend this congress will be addressed to foreign countries. Professor von Leyden spoke on the same subject and expressed a hope that the congress would contribute to make the success of the national

movement for combating tuberculosis in Germany more widely known and that it would secure fresh supporters for this work of humanity.

CONSUL-GENERAL GOWDY, of Paris, in his annual report, says that during the past year there has been a marked increase in the adoption of automobiles, not only as pleasure vehicles, but for practical application in the way of cabs serving the public in the city of Paris, and for business purposes in the way of delivery wagons, especially those for long distances. It is announced that at the beginning of next year there are to be 100 motor cars driven by electric power running in the streets of Paris, and, if the experiment be successful, the cabs will be increased to 1,000. With this project in view, a large plot of ground has been acquired, where the building of works necessary for the housing of the cabs and the machinery for the electric supply are being rapidly completed. A training ground has also been made for the cabmen. This is laid out with every possible form of paving, wood, asphalt, stone, etc., including two steep hills. Here and there are dotted about a number of dummy figures, and in and out of these the cabmen have to maneuver, under the orders of an instructor. As a rule, in four lessons, it is stated, the driver is ready to navigate Paris and after ten lessons is considered thoroughly competent. Each cab is supplied with sufficient power to be driven 30 miles at about 8 miles an hour.

THE *London Times* states that Dr. Ferras, who has been in practice in Calcutta since 1853, in his evidence before the Plague Commission, on January 4th, expressed the opinion that there had never been plague cases in Calcutta, but simply cases of malignant fever. He remembered seeing similar cases when a student in Calcutta which were indistinguishable from plague except bacteriologically. There had been no bacteriological experts in India since the time of Dr. Cunningham. Unless Calcutta was improved structurally and the *bustis* were cleared and the overcrowded areas opened out, there was no chance that malignant fever would disappear. Captain Bingley, who had been employed on plague duty in Bombay, recommended munici-

pal camps as a remedy for overcrowding. They had been tried at Bombay, but were not successful, as they were started too late. A camp in his own district was very successful. The people willingly paid two rupees a month, which covered the expenses and paid the interest. The plague increased after the season of the export of grain, because the rats then left the *bandars* and spread through the town in their search of food, carrying the infection with them. The *bandars* were the foci of the plague. Mr. Griesbach, Director of the Geological Survey of India, gave evidence as to the formation of the soil in the infected areas which pointed to the trap and crystalline area being specially adapted to the spread of the disease, but the witness explained that Bombay was situated near the center of the Deccan trap formation. On the alarm of the plague the people naturally spread fanlike over the adjoining country. There was abundant evidence that the tenacity with which epidemics clung to localities was influenced by the geological formation.

THE University of the State of New York announces that one of the most important of the twenty-two bulletins issued by the museum is sent to the schools this month. This is a large octavo of 156 pages, entitled a 'Guide to the study of the geologic collections of the New York State Museum,' by Dr. Frederick J. H. Merrill, Director. In the front pocket is a folded relief map showing the boundaries of the geologic systems on a scale of twenty-four miles to an inch, and the entire volume is profusely illustrated with half-tone photographs of geologic features. The general plan is such that it will serve as a guide to any other geologic collections in New York, and will also be useful to teachers in New York secondary schools who wish to direct the attention of their students to local geology. It gives briefly a digest of the New York geologic reports, with much useful introductory matter, and is meant, not in any sense to replace the small text-books, but to supplement them by giving information found as a rule only either in the larger and more expensive books which are not accessible to most teachers and students, or in a multitude of scientific papers.

FROM a Blue Book on the Straits Settlements *Nature* learns that the Perak Museum at Taiping is now overcrowded, and that there is consequently much difficulty in arranging the collections in their natural sequence, while there is practically no room for new specimens. The Taiping collections are specially rich in the ethnological and mineralogical branches, and the zoological specimens have recently been greatly improved. The photographic and botanical branches were extended during the year, and the museum now contains a valuable section allotted to economic botany. Investigations were carried out, with satisfactory results, on the subject of insects attacking coffee, rice and other agricultural products, and some experiments were made in connection with tapping rubber. Discussion has been going on as to constituting the museum at Taiping a central museum, supported by all the Federated Malay States. The curator at Taiping suggests that local museums, of which one has been in existence for several years at Selangor, and which, it is hoped, will soon be established in the other States, might either be affiliated to, or form branches of, the Federal Museum. On the other hand, the British Resident at Selangor urges that the existence of a local museum creates and sustains in the minds of the community an interest in local products, their sources and uses, which cannot fail to be beneficial and deserving of encouragement, and it cannot be urged that people in Selangor or the Negri Sembalin will obtain any advantage from a museum in Perak, however complete, which few of them will probably ever see.

IN the museum of the Royal Agriculture and Commercial Society of British Guiana at Demerara, says *Natural Science*, various changes have recently been introduced. The exhibited series of birds has been revised according to the British Museum catalogue, and over 200 specimens have been remounted. Other groups have been partially revised, so far as is possible in the absence of modern literature. It is hoped that the issue of a revised edition of the British Museum Catalogue of Fishes will enable the Curator to work up those animals as completely as the birds; meanwhile a comprehensive collection of British Guiana fishes is

being made, and preserved for the most part in formalin. Exhibition space in this museum has been extended by the addition of an upper gallery. Chief among recent acquisitions is a large series of rocks collected in the Northwest District by J. B. Harrison and H. I. Perkins, to illustrate a government report. The chief difficulty in the curatorial work of this museum is presented by atmospheric changes and over much moisture. It is satisfactory to learn that many inquiries are made at the museum, both personally and by correspondence, and that it is becoming more and more a general educating force in the colony.

UNIVERSITY AND EDUCATIONAL NEWS.

AT the annual meeting of the Board of Regents of the Smithsonian Institution, held in Washington on January 25th, an inquiry was raised as to the propriety and expediency of taking action toward the establishment of a national university, and a committee was appointed to investigate and report at the next meeting. The committee is: John B. Henderson, of Washington; Alexander Graham Bell, of Washington; William L. Wilson, of Virginia (the three members of the Executive Committee of the Board of Regents); James B. Angell, of Michigan, and Robert R. Hitt, of Illinois.

COLUMBIA University is making plans to establish a summer school during and after the summer of 1900. The courses, as is usual in summer schools, will be planned with special reference to the needs of teachers, and the resources of the Teachers College will be fully utilized.

THE Cornell Medical College proposes to establish a summer school of medicine to be given in New York hospitals and dispensaries.

THE State University of Iowa announces a course of lectures on the Elements of Anthropology, to be delivered early in March by W. J. McGee, Ethnologist in charge, Bureau of American Ethnology.

DR. E. B. MCGILVARY, of the University of California, has been called to the Sage professorship of moral philosophy at Cornell University, vacant by the removal of Professor Seth to the University of Edinburgh.

PROFESSOR C. A. KEEFER, of the Division of Forestry, Department of Agriculture, has been elected professor of agriculture and horticulture in the New Mexico Agricultural College.

MR. J. S. E. TOWNSEND, B.A., of Trinity College, Cambridge, has been elected to the Clerk Maxwell scholarship.

DR. G. MEYER, till now first assistant in the Physical Institute, has been elected to an assistant professorship of physical chemistry in the University of Freiburg. Dr. Zehnder, assistant professor of physics at Freiburg, in Br., has been called to Würzburg as first assistant to Professor Röntgen. Dr. Otto Wiedeburg, docent in physics in the University at Leipzig, has been promoted to an assistant professorship. Dr. Sidler, assistant professor of astronomy at Berne, has been given an honorary professorship. In the Faculty of Science at Nancy the following changes have been made: M. Floquet, professor of pure mathematics, has been made professor of analytical mathematics; M. Molk, professor of applied mathematics, has been made professor of mechanics; M. Haller, professor of chemistry, is professor of organic chemistry, and M. Güntz has been appointed professor of mineralogical chemistry.

Two of the more important chairs at Oxford are vacant—the Sedleian professorship of natural philosophy, so long filled by the late Dr. Bartholomew Price, and the Linacre professorship of comparative anatomy, vacant by the removal of Professor Ray Lankester to the British Museum. *Natural Science* reports that the past students of Professor W. F. R. Weldon, of University College, London, are signing a testimonial to their former teacher in view of his candidature for the latter chair. Among others whose names are mentioned as candidates are Mr. F. E. Beddard, prosector to the Zoological Society of London; Mr. G. C. Bourne, who for many years has been demonstrator and lecturer at Oxford; and Mr. W. Baldwin Spencer, formerly demonstrator to Professor Moseley and now professor of zoology at Melbourne. The last mentioned is now visiting Great Britain. The method of filling chairs at Oxford is not above criticism. On the board appointing a successor to Professor Lankester theology and medicine are well represented, but not natural science.