

SCIENTIFIC NOTES AND NEWS

It is announced that Dr. H. B. Fine, professor of mathematics in Princeton University, has been offered by President Wilson the ambassadorship to Germany.

DR. DAVID F. HOUSTON, secretary of agriculture, will retain the chancellorship of Washington University on leave of absence. Professor F. A. Hall, dean of the college, has been appointed acting chancellor.

PROFESSOR WILLIS LUTHER MOORE, who has been chief of the United States Weather Bureau since 1895, will retire from this office on July 31.

DR. ELIE METCHNIKOFF, assistant director of the Institute Pasteur, Paris, has declined the directorship of the Institute of Experimental Medicine at St. Petersburg, vacant by the death of Dr. B. Podvysotsky.

THE ministry of public instruction of the French government has selected Dr. Maxime Bôcher, professor of mathematics in Harvard University, as exchange professor for 1913-14. His term of service will fall in the winter semester and will be spent at the University of Paris.

PRESIDENT DAVID STARR JORDAN, of Stanford University, has leave of absence to go to Europe in the interest of the peace movement.

PROFESSOR ARTHUR SCHUSTER, F.R.S., has been elected president of the Physical Society, London.

PROFESSOR W. M. DAVIS, of Harvard University, has been elected honorary member of the Hungarian Geographical Society at Budapest, and foreign member of the Swedish Anthropological and Geographical Society at Stockholm.

ON March 1 there was given in New York City, at Delmonico's, a dinner to Professor Russell H. Chittenden, director of the Sheffield Scientific School of Yale University, by his former pupils and a few other friends. Nearly one hundred were present, there being representatives of almost every Yale class from 1874 to 1908. Dr. Frank S. Meara, '90, acted as toastmaster and addresses were given

by Dr. John A. Hartwell, '89 S., chairman of the committee having the dinner in charge; Professor Graham Lusk, '96 Hon.; Professor Henry H. Donaldson, '79; Professor W. T. Sedgwick, '77 S.; Professor Harvey Cushing, '91; Dr. Elliott P. Joslin, '90 and '91 S.; Dr. P. A. Levene, and Professor Chittenden. At the close of the speaking, Dr. Meara announced that the National Institute of Social Sciences had voted a medal to Professor Chittenden in recognition of the distinction he has attained in original investigation in the field of physiological chemistry. Dr. H. Hollbrook Curtis, '77 S., secretary of the institute, made the presentation. Professor Mendel then presented to Professor Chittenden a set of engrossed resolutions which had been adopted by his fellow members of the board of trustees of the Sheffield Scientific School. It was announced by the committee, through its chairman, that Professor Chittenden's pupils were desirous of expressing their appreciation of his work in some such way that it might have a permanent value, and that to this end there was being raised the Russell H. Chittenden Fund, the income from which should be expended for the benefit of the department of physiological chemistry in the Sheffield Scientific School.

ON March 25, 1914, Geh. Ober-Regierungsrat Professor Dr. A. Engler, professor of botany in the University of Berlin, director of the Royal Botanic Garden and Museum at Berlin-Dahlem, member of the Academy of Science of Berlin, will celebrate his seventieth birthday. In order to commemorate this occasion, his friends in Germany and throughout the world have issued a circular letter requesting that subscriptions toward a marble bust be sent to Professor Dr. Wittmack, Berlin, N. W. 40, Platz von dem neuen Tor 1. The bust will be made by Herrn Bildhauer Manthe, of Schmargendorf.

PROFESSOR RALPH HOAGLAND, head of the division of chemistry of the College of Agriculture, University of Minnesota, has resigned and gone to Washington, D. C., where he will enter on his work in the Bureau of Animal Husbandry.

H. B. HUMPHREY, formerly head of the department of botany in the State College of Washington, has been appointed to fill the position of pathologist in charge of cereal disease investigations in the Bureau of Plant Industry of the Department of Agriculture.

PROFESSOR E. O. JORDAN, of the department of pathology and bacteriology in the University of Chicago, has accepted an invitation to become a member of the national commission for the determination of a standard of purity for drinking water. This commission has been formed in connection with the enforcement of regulations relative to pure drinking water, and its object is to establish a federal standard which shall be generally applicable.

PROFESSOR GEORGE D. STRAYER, of Columbia University, has been appointed chairman of a committee of fifteen of the National Council of Education to report on standards and tests of educational efficiency.

DONALD F. MACDONALD, geologist of the Isthmian Canal Commission, left Panama on March 11 for a month or more of geological exploration in the interior of Panama. The work will be carried on under the auspices of the Smithsonian Institution.

MR. VILHJALMUR STEFANSSON lectured before the members of the Royal Geographical Society on March 10 on "The Arctic Islands and their Eskimo Inhabitants." Mr. Stefansson, as has been announced, is at the head of a scientific expedition which will start from Victoria, British Columbia, in June, to explore the Arctic shores of Canada and to make further studies of the Eskimos of Victoria Island on behalf of the Canadian government.

PROFESSOR CHARLES RICHMOND HENDERSON, head of the department of practical sociology in the University of Chicago, who has been the Barrows lecturer for six months in the chief cities of India, China and Japan, will resume his regular work at the university near the opening of the spring quarter. The Barrows lectureship, which was established by Mrs. Caroline E. Haskell, provides for a series of lectures in the orient every three years on

the general subject of the relations of Christianity to other religions.

ON March 8 Professor S. F. Acree, of Johns Hopkins University, lectured before the chemistry department of Princeton University on "The Reactions of Both the Ions and the Non-ionized Forms of Electrolytes."

ON March 12 Professor Hugo Münsterberg delivered a lecture at Johns Hopkins University on "Psychology of Labor."

MR. FRANK P. STOCKBRIDGE, editor of *Popular Mechanics*, will give a series of weekly lectures on journalism to the students of the course in journalism at the University of Wisconsin this spring.

A COURSE of four public lectures on the theory of the solid state, has been delivered at University College, London, by Professor W. Nernst, director of the Institute of Physical Chemistry in the University of Berlin.

A NUMBER of friends, colleagues and pupils of the late Paul Segond have planned a memorial fund in honor of the memory of the surgeon. The income will be used to help internes approved by the council of the Faculté de médecine at Paris to pursue research work and to prepare for their examinations.

It has been decided to perpetuate the memory of the late Alderman C. G. Beale, vice-chancellor of Birmingham University, by (1) the endowment or partial endowment of a chair in the university to be selected hereafter by the university council, and to be called the Beale chair; and (2) a collection of British birds and their nests, mounted in their natural surroundings, to be placed in cases in the first room of the future Birmingham Natural History Museum. Sir Charles Holcroft has promised a donation of £5,000, to be devoted to the endowment of the university chair and there are other gifts amounting to £4,000.

IN November last a meeting of old students and friends of the late Professor Tait was held in the physical laboratory of the University of Edinburgh, Principal Sir William Turner presiding, when a committee was appointed to establish a memorial. The com-

mittee has now decided to recommend the raising of a fund of from £20,000 to £25,000, for the purpose of endowing a second professorship of natural philosophy in the university. The proposed chair would be connected with the department of Professor Tait's work in which he achieved especially conspicuous success, namely, the application of mathematics to the solution of physical problems, including those which bear upon engineering and other departments of applied science; and the committee feel sure such a chair would not only form an appropriate and worthy memorial, but would also be in itself of the highest utility. The committee are making every effort to bring the project to the attention of all old students, both at home and abroad, and they are confident of getting into communication with over 6,000 of them. They feel justified, however, in appealing not to old students merely, but also to men who were associated with the professor in any department of his work; to natural philosophers, mathematicians and scientific men generally, who through their study of his publications have become indebted to him as a teacher; to those who are interested in the progress of the Scottish universities, and recognize the great value of his services to education; and to such of his fellow citizens as take pride in his scientific eminence and recall with interest his picturesque personality. The hon. secretary, Professor J. G. MacGregor, the University, Edinburgh, will be glad to furnish any information that may be desired, either by letter or, in cases in which it may be possible, by personal interview. Subscriptions should be sent to the honorary treasurer, Sir George M. Paul, 16 St. Andrew Square, Edinburgh.

A MEMORIAL to the late Sir J. D. Hooker, which has been placed in the parish church at Kew, near the similar memorial to his father, Sir W. J. Hooker, was unveiled by Lady Hooker on February 22. It consists of a mural tablet of colored marble bearing an inscription, below which is a Wedgwood medallion portrait of Sir Joseph, flanked and supported by five panels containing Wedgwood figures of plants with which there had grown up some especial association.

THE death is announced, at the age of ninety-one, of Major-General Henry Clerk, who was elected a fellow of the Royal Society so long ago as 1848. He was the author of papers on the strength of timber, and the flow of liquids through small orifices and other subjects.

DR. RUDOLPH FRANK, professor of surgery at Vienna, has died at the age of fifty years.

It is stated in *Nature* that Mr. R. J. Balston, of Maidstone, has presented to the British Museum (Natural History) his well-known collection of humming-birds. The birds are mounted and arranged in forty-nine cases, each of which contains a group of two or more species. The total number of specimens in the collection is stated in Mr. Balston's manuscript to be 3,315, representing 162 genera and 480 species. Of these, 2,674 are skins, and 199 nests, some of the latter containing eggs. As soon as arrangements are made for its reception the series will be placed on exhibition in one of the corridors on the first floor of the zoological department. This collection and the Gould collection will render the exhibited series of humming-birds one of the finest, if not actually the finest, in the world.

THE Peabody Museum of American Archeology and Ethnology of Harvard University, has recently received two important acquisitions. The first is a valuable collection of prehistoric pottery from the mounds of the Red River region, Arkansas. This pottery, which is the gift of Mr. Clarence B. Moore, '73, of Philadelphia, Pa., came to the museum in several hundred fragments. They have now been cemented together and added to the regular exhibit. The other acquisition is a large collection of stone implements from the Island of Grenado, W. I., the gift of Dr. Thomas Barbour, '06.

A WEEKLY journal entitled *Die Geisteswissenschaften* has been established under the editorship of Dr. Otto Buek, of Berlin, and of Professor Paul Herre, of Leipzig, published at Leipzig by Veit and Co. The scope of the journal includes philosophy, psychology, mathematics, religion, history, philology, art,

law, sociology and education. The announcement states that the journal undertakes "für das Gebiet der Geisteswissenschaften ein ähnliches Programm verwirklichen, wie ihm für die Naturwissenschaften in England die 'Nature,' in Amerika die 'Science,' in Deutschland 'Die Naturwissenschaften' nachstreben."

We learn from *Nature* that the will of the late Mr. Rowland Ward, the taxidermist, directs that the trustees with respect to his charitable bequests shall expend 500l. per annum out of the income of his residuary estate, after the legacies and annuities specified have been paid, for a period of ten years in the purchase of specimens to be presented to the Natural History Museum, South Kensington. The residue of his estate is left in equal shares to such eight of fourteen selected charitable and other institutions as his widow shall choose. In default of his widow's selection within twelve months of the testator's decease, the whole of the fourteen institutions—which include the Natural History Museum—are to share equally.

The only public standardizing and testing laboratory for public utilities and industries generally, outside of the one maintained by the Bureau of Standards at Washington, has just been established by the regents of the University of Wisconsin, in cooperation with the Wisconsin Railroad Rate Commission. The purpose of the university's new laboratory is to render more direct service to public utilities and to industries of the state by supplying them at a reasonable cost with the opportunity to have meters and similar instruments scientifically tested. Hitherto the smaller public utilities and industries that could not afford to maintain testing laboratories of their own have been compelled to have their testing done as favors by a few large companies that could maintain testing laboratories.

The following lectures are being given at the University of Minnesota:

January 17—"Eugenics and Race Betterment," Dr. Victor C. Vaughan, dean of the department of medicine and surgery, University of Michigan.

January 28—"Cancer and its Prevention," Dr. L. B. Wilson, of the Mayo Hospitals, Rochester, Minnesota.

February 11—"Heredity and Environment," Dr. E. L. Tuohy of Duluth.

February 25—"The Nature of Disease," Dr. W. T. Councilman, professor of pathologic anatomy, Harvard Medical School.

March 11—"Public Health a Public Duty," Dr. Mazyek P. Ravenel, professor of bacteriology, University of Wisconsin, and director of the Wisconsin State Hygienic Laboratory.

April 1—"The People's Responsibility in Dealing with Public Health Problems," Dr. H. M. Bracken, executive officer, Minnesota State Board of Health.

April 15—"The Need for an Efficient National Health Service in the United States from an Economic Standpoint," Dr. John B. Murphy, professor of surgery, Northwestern University Medical School.

April 29—"The Profession of Medicine; an Agency in Social Service," Dr. Richard Olding Beard, professor of physiology, University of Minnesota.

May 6—"The Growth of Hygienic Ideals," Dr. Henry B. Favill, professor of medicine, Rush Medical College.

THE United States Bureau of Education has just published a *Bibliography of the Teaching of Mathematics*, covering the period from 1900 to 1912, by David Eugene Smith and Charles Goldziher. This bulletin gives 1,849 titles of books and articles on the teaching of mathematics that have appeared since 1900. The bulletin will be sent free upon application to the United States Commissioner of Education, Washington, D. C.

We learn from the London *Times* that an arrangement has been made for cooperation between the British board of trade and the principal Atlantic steamship lines in carrying out during the present year the recommendations of the merchant shipping advisory committee in their report on life saving at sea with respect to stationing a vessel for ice observation to the north of the steamship routes across the North Atlantic. In accordance with the advice of a special conference summoned by the board of trade to consider the best means of giving effect to this recom-

mendation, it is proposed that a vessel should be stationed off the east coast of North America to the north of the steamship routes during the coming spring to watch the break-up of the ice and to report its movement on the way to the routes. The *Scotia*, a whaler, formerly employed in the Scottish Antarctic Expedition, has been chartered to carry out this work, and it is anticipated that she will be ready to leave Dundee, where she is at present lying, about the end of this month. The vessel is being fitted with a Marconi wireless installation having a long range, so that she will be able to keep in touch with the wireless stations in Newfoundland and Labrador. The cost of the expedition will be shared between his majesty's government and the principal Atlantic steamship lines. In order to make the necessary observations in connection with the movement of the ice, there will be three scientific observers in the *Scotia*. As the vessel will from time to time be stationary, it is expected that these observers will be able to make oceanographical and meteorological observations as to currents, etc., which will be of general scientific interest, as well as of direct value to the work in hand. The *Scotia* is a wooden barque of 357 tons, built at Drammen in 1872, and is fitted with an auxiliary steam engine.

EIGHT trains sent out to all parts of Wisconsin by the College of Agriculture of the University of Wisconsin to demonstrate better farming methods reached 32,275 people, according to the report of the men in charge of the trains. These trains traveled about the state for thirteen weeks stopping every little way to give farmers an opportunity to visit them, and learn how their crops and livestock could be improved. Men from the agricultural college accompanied each train and lectured wherever stops were made. The trains were of three kinds. One kind was devoted to livestock, another to grains, and the third to potatoes. In the livestock trains prize animals were shown together with exhibits illustrating the care and feed of them. Lectures and informal talks on the value of using

pure-bred animals and kindred subjects, supplemented the various exhibits. Exhibits illustrating the good results attending the use of high-grade seed grains, how to improve the quality and yield of potatoes, etc., were shown in the grain and potato demonstration trains.

WITH Admirals Bradford and Chester in attendance, Captain J. L. Jayne, superintendent of the U. S. Naval Observatory, inaugurated Monday afternoon, February 10, a system of fortnightly meetings of the scientific staff for the discussion of topics relating to the work of the observatory. Professors Skinner and Frisby, now retired, but formerly for many years actively engaged in the work of the observatory, also took part in the proceedings. The paper of the afternoon, by Dr. W. D. Horigan, librarian, on "The Founding of the Observatory," detailed the meager progress of astronomy in this country during the eighteenth and the early part of the nineteenth centuries, and traced the efforts of various learned men and statesmen to establish a national astronomical observatory, up to the crowning of their efforts in the founding of the U. S. Naval Observatory in 1842. For the bringing about of this event the scientific world is directly indebted to Lieutenant J. M. Gilliss, U. S. Navy. In the discussion following the paper, Admiral Chester, formerly head of the observatory, stated that the paper should be printed in order that astronomers the country over should benefit by the thorough researches of the author.

ACCORDING to the *Journal* of the American Medical Association the American Telephone and Telegraph Company, the Western Union Telegraph Company and the Western Electric Company have made public a comprehensive plan for the payment of sick benefits and life insurance for their 175,000 employees. It is said that \$10,000,000 is available for this purpose. In connection with this pension plan there is to be gradually established a system of medical supervision and preventive sanitation designed to preserve the health of employees. The preventive measures will not only include early detection of disease among

employees, but also a supervision of sanitary conditions in offices and workshops and the instruction of employees in hygiene. The plan does not necessarily propose to furnish medical attendance to employees, but it will aid them in securing prompt and efficient treatment. Arrangements will be made with hospitals throughout the country for the prompt reception of those who seek this kind of treatment. It is believed by the companies that this plan will be an economical advantage to both parties. Dr. Alvah H. Doty, formerly health officer of the port of New York, has been appointed director of this department.

WITH a view of elucidating the history of native cotton, Mr. Frederick L. Lewton, of the U. S. National Museum, has written a pamphlet entitled "The Cotton of the Hopi Indians: A New Species of *Gossypium*," forming publication No. 2,146 of the Smithsonian Miscellaneous Collections. The fact that cotton was used and of necessity cultivated by the Indians, is recorded by several early Spanish explorers, as it has been more recently by many ethnologists. In the villages of the cliff-dwellers of Mesa Verde National Park numerous fragments of cotton cloth have been unearthed, and, in Utah, the seeds of the plant itself have been found. To-day, among the Hopi Indians of Arizona, the cotton plant is highly esteemed, and its fiber enters into many of their ceremonies, as well as into many practical household activities. It is considered essential by them that all strings employed in religious services be of native cotton. These strings of cotton are used to bind together prayer sticks and offerings of all kinds, and are placed in the trails entering the pueblos where ceremonial services are in progress; the badges of the chiefs are all wrapped with native rough-spun cotton strings; and cotton is also used to weave ceremonial kilts, belts and wedding blankets. Unfortunately the native Hopis, once deft in the art of weaving blankets, mantles, rugs and other articles from cotton, now find it far easier to purchase either the yarn already spun, the cloth already woven, or the complete

garment, and thus the art is gradually being lost. Cotton is still cultivated by them, however, to a small extent, in a village in the western Navajo Reservation and in another of the Moqui. The Department of Agriculture has carried on experiments with Hopi cotton for the past seven years. This particular species of cotton is remarkable in the rapidity with which it grows and the early date at which it blooms, it being the earliest to blossom of several hundred species put to test. Plants of this species have borne ripened bolls in eighty-four days from the sowing of the seed. Following a pertinent discussion as to the history and development of this particular sort of cotton, Mr. Lewton describes botanically the distinguishing features of a new species which he calls *Gossypium hopi*, and which is illustrated by five plates showing the growing plants, the flowers and the maturing and ripe bolls.

How the county "poor" farms of Wisconsin are being utilized to convince farmers of the advantages of up-to-date methods of agriculture, is explained by F. B. Morrison, assistant to Dean H. L. Russell, of the University of Wisconsin College of Agriculture, in the current number of the university's alumni magazine. In 1909 the college of agriculture instituted field demonstrations on several "poor" farms. The most approved methods of agriculture are put into practice on these fields so that the farmers of the surrounding country can see for themselves the results of simple improvements over their own methods. Each county farm is also made the center for distribution of pure-bred seed grain, bred scientifically at the college of agriculture. The demonstration fields are located on main traveled roads so that farmers passing by may see the results during the entire growing season. Farmers are always welcome at the demonstration fields and are encouraged to ask as many questions as possible. When the demonstration crops are at their best an annual demonstration picnic is held to which all the surrounding farmers and their families are invited. Sometime during the day of the

picnic all the participants are taken out to the demonstration fields and there the methods used to secure high yields are explained by professors from the agricultural college. How popular these meetings are is shown by their growth in attendance. In 1909 the average number present at a meeting was 80; this year it was 450. A notable result of these demonstration fields and demonstration picnics is the great improvement in agricultural methods in the sections where they are in force.

UNIVERSITY AND EDUCATIONAL NEWS

THE London correspondent of the *Journal* of the American Medical Association writes that the British government has made arrangements for taking part in the tropical diseases exhibition to be held at Ghent this year. The London School of Tropical Medicine, the Liverpool School of Tropical Medicine, the Cairo and Khartum schools, the navy and the army will be represented. Each of these organizations has been given certain diseases to illustrate in a popular manner, so that people may realize what is being done to make the tropics habitable to mankind. The cases will contain specimens of the insect pests which are the cause of the spread of disease in the tropics, with examples of the culture of bacteria taken from their blood, and numerous microscopic and photographic views of the development of the different stages. In all, thirteen diseases will be illustrated. The London School of Tropical Medicine will make a complete display of the work in progress in connection with cholera, beriberi and elephantiasis, including any fresh information available consequent on the outbreak of cholera among the Balkan troops. The Liverpool school will set out the work that is being carried on against yellow fever and sleeping sickness, diseases in which the school has specialized for a long time. The admiralty will exhibit what has been done by the fleet surgeons in the matter of undulant fever, more commonly known as Malta fever, and due to

the goats of the island. The war office will take up that scourge of all armies, typhoid fever, and will depict the results of the study in the prevention and cure of the disease. Plague comes under the direction of the India office, and Dr. Andrew Balfour, of the Egyptian service, will make a special exhibit dealing with leprosy and other eastern diseases. Most, if not all, of the exhibits will make an important feature of the part played by flies, mosquitoes, fleas and rats in the distribution of disease. Part of the display is intended to inform the public how best to guard against these insect pests. Mosquito-proof houses, mosquito-proof clothing, and even mosquito-proof books are to be on view. A rat-proof house will be included in the departmental exhibits. There will be several examples of foods which have been deprived of their nutritive qualities, such as polished rice, which causes beriberi. The Liverpool school, which deals with this subject, will exhibit tinned foods from which the nutritive properties have been withdrawn in the process of preserving.

THE Arkansas general assembly has appropriated \$36,000 for the medical department of the University of Arkansas for the biennial period ending March 31, 1915.

LAKE ERIE COLLEGE has obtained the sum of \$200,000 for general endowment.

THE Tucker fund committee at Dartmouth College has established a fellowship of the value of \$1,200 which may be renewed for a period of three years; the holder of the fellowship may study at an American or foreign university and at its expiration must be prepared to accept an instructorship at Dartmouth College.

DR. CHARLES F. MYERS, of New York City, has bequeathed \$25,000 to Acadia University, Nova Scotia, to establish a professorship of biology.

MR. AUGUSTUS NASH has bequeathed the residue of his estate in trust to pay a near relative the income during life, and afterwards to pay the capital sum to Bristol University in the hope that it may be used to ad-