SCIENTIFIC NOTES AND NEWS.

The new medical buildings and laboratories of Toronto University, described by Professor A. B. Macallum in a recent issue of Science, were officially opened on October 1. The opening address was given by Professor Charles S. Sherrington, of Liverpool. Speeches were made by representatives of the various institutions, and an address in the evening was made by Professor William Osler, of the Johns Hopkins University. A special convocation was held on October 2, at which the following distinguished visitors received the honorary degree of LL.D. from the university: William Williams Keen, Jefferson Medical College, Philadelphia; William Henry Welch, Johns Hopkins University; William Osler, Johns Hopkins University; Russell Henry Chittenden, Yale University; Charles S. Sherrington, University of Liverpool; Henry Pickering Bowditch, Harvard University (in absentia).

Professor von Behring, the eminent pathologist, has been made a member of the Russian privy council.

Professor Charles M. Bristol, of New York University, returned on October 7 from the Bermuda Islands, where he has had charge of the Biological Station. He spent the last three weeks in making a collection of tropical fishes, which are to be exhibited under the auspices of the U. S. Bureau of Fisheries at its salt-water aquarium in St. Louis during the World's Fair of 1904.

SIR DANIEL MORRIS, British Imperial Commissioner of the Department of Agriculture for the West Indies, and Mr. John R. Rovell, of the Agricultural Department of Barbadoes, are at Charleston, to make a study of the cultivation of cotton.

M. Dybowski, the French inspector of colonial agriculture, has been sent on a mission to study the agricultural conditions in Senegal and French Guinea.

DR. HENRY S. PRITCHETT, president of the Massachusetts Institute of Technology, sailed on October 5 from New York on the steamer Kronprinz for Germany. It is expected that he will be absent from Boston for only about four weeks.

Mr. W. N. McMillan, of St. Louis, who recently failed in an attempt to explore the course of the Blue Nile, is returning to this country. He expects to start with another expedition in December.

Dr. G. S. Fraps, assistant professor of chemistry at the North Carolina College of Agriculture and Mechanic Arts, and assistant chemist at the North Carolina Experiment Station, has been appointed assistant chemist to the Texas Experiment Station at College Station.

Mr. Clarence T. Johnston, for several years past assistant in the irrigation investigations of the Department of Agriculture, and in charge of the office at Cheyenne, Wyoming, has resigned to accept the appointment of state irrigation engineer of Wyoming.

Mr. Clarence B. Lane, assistant in dairy husbandry at the New Jersey station, has been appointed assistant chief of the dairy division of the Agricultural Department. He succeeds Mr. Harry Haywood, who resigned during the summer to assume charge of the newly organized agricultural department at the Mount Herman School, near Northfield, Mass.

The French government has appointed a commission to study the causes of the disappearance of the sardine. It consists of M. Vaillant, professor at the Museum of Natural History; M. Domergue, inspector general of marine fisheries; and M. Canu, director of the agricultural station at Bologne-sur-Mer.

Professor Ferdinand Hueppe, of Prague, is giving this month at King's College, London, the Harben lectures of the Royal Institution of Public Health.

THE Christian A. Herter lecture, at the Johns Hopkins University, the first of the series established by Dr. and Mrs. Herter, of New York City, a year ago, was given by Dr. Herter on October 6, his subject being 'The Work of Pasteur.'

Among the lecture courses arranged for the present season by the Brooklyn Institute of Arts and Sciences is a course of six lectures

by Professor Harry C. Jones, of the Johns Hopkins University.

Dr. Jacques Loeb, professor of physiology at the University of California, was expected to lecture at Stanford University on October 13, under the auspices of the Sigma Xi Scientific Society.

Professor Davidson has been appointed literary executor under the will of the late Professor Bain. He is empowered to edit a volume of remains and a biography, for which ample materials have been left.

A STATUE in honor of the eminent French neurologist M. Charcot has been erected at Lemolon-les-Bains.

MR. CORNELIUS VAN BRUNT, of New York city, well known as a botanist and especially for his beautiful reproductions of flowers, died on October 1 at the age of seventy-six years.

Mr. John Allen Brown, the author of numerous contributions to anthropology and geology including a work on paleolithic man in northwest Middlesex, died in London, on September 24, at the age of seventy-two years.

The deaths are also announced of Dr. Rudolf Lipschitz, professor of mathematics at Bonn, and of M. A. Certes, known for his bacteriological researches and formerly president of the French Zoological Society.

THE statement having been published that the heavy fall in the shares of the U. S. Steel Corporation would adversely affect the value of the gifts bestowed by Mr. Carnegie, that gentleman has telegraphed as follows: "Skibo Castle, N. B.—Mr. Carnegie never owned any second mortgage bonds or shares of the United States Steel Trust. His bonds are first mortgage, covering all the property, and are not quoted upon the Stock Exchange."

On October 1, the organization of the Wisconsin State Hygienic Laboratory was completed in accordance with the legislative enactment of last winter. The laboratory is located at Madison in connection with the Bacteriological Department of the University of Wisconsin and is expected to cooperate with the State Board of Health in its work. The

director of the laboratory is Professor H. L. Russell. Mr. G. J. Marquette has been appointed first assistant. The work of the laboratory will be along the usual lines followed in board of health work.

The American Geologist states that a movement is on foot in the state of Nebraska for the erection at Lincoln of a special building for the use of the Historical Society and the Geological Survey of the state.

The governing body of the Lister Institute of Preventive Medicine announces that the necessary legal formalities in connection with the change of name of this institute have now been completed, the Board of Trade having sanctioned the new name. The institute will therefore now be known as the 'Lister Institute of Preventive Medicine,' instead of the Jenner Institute of Preventive Medicine. The address, Chelsea-gardens, S.W., remains the same.

In pursuance of the British Board of Agriculture and Fisheries Act, 1903, the powers and duties of the Board of Trade under the Salmon and Freshwater Fisheries Acts, the Sea Fisheries Regulation Acts and other Acts relating to the industry of fishing have been transferred from that department to the Board of Agriculture, which is to be styled in future the Board of Agriculture and Fish-An additional assistant secretary to the Board of Agriculture and Fisheries for fishery business has been provided for, and the Earl of Onslow has appointed to that position Mr. Walter Edward Archer, who has hitherto held the post of chief inspector of fisheries under the Board of Trade.

The American Geologist states that under the auspices of the Civil Commission in charge of the Philippine Islands and immediately under the supervision of Mr. D. C. Worcester, the secretary of the interior of islands, there has been established a mining bureau. This bureau contemplates a thorough investigation into the natural resources of the principal islands, and has already published a finely printed and illustrated bulletin on the iron ores, prepared by Mr. H. D. McCaskey. This mining bureau desires to secure the services

of a good petrographer and an experienced paleontologist. Inquiries may be addressed to Mr. McCaskey at Fort Sheridan, Ill.

THERE will be a civil service examination on November 11, to fill the position of assistant in soil management, Bureau of Soils, Department of Agriculture, at an annual salary of \$1,000 to \$1,400 a year.

A MEETING was held at Tacoma, Washington, on October 7, to protest against the government's policy of increasing the reserves in the northwest. The meeting was addressed by Mr. Gifford Pinchot, chief of the Bureau of Forestry, who promised that no unnecessary restrictions should be placed on opening the forest reserves to agriculture or to the proper cutting of timber.

The Iowa Anthropological Association has been organized with headquarters at Iowa City. Duren J. H. Ward, Ph.D., is the secretary. An anthropological survey of the state is already under way.

At the last annual meeting of the American Electro-Therapeutic Association, held at Atlantic City, N. J., on September 22, 23 and 24, 1903, the following officers were elected: President, Alonso David Rockwell, A.M., M.D., New York, N. Y.; First Vice-President, Willis Spring, A.B., M.D., Minneapolis, Parsons Second Vice-President, Minn.; William Winslow Eaton, A.M., M.D., Danvers, Mass.; Treasurer, Richard Joseph Nunn, M.D., Savannah, Ga.; Secretary, Clarence Edward Skinner, M.D., LL.D., New Haven, Conn. The next annual meeting will be held at St. Louis, Mo., on September 13, 14, 15 and 16, 1904.

A society for the study of tropical medicine has been organized at Philadelphia, with Dr. Thomas H. Fenton as president, and Dr. Joseph McFarland as secretary.

An International Sanitary Congress for the Adoption of Means of Defense against Cholera and the Plague opened at Paris on October 10. Representatives of twenty-five powers were present, including Surgeon Anderson, United States Navy, medical inspector of the United States European station; Col. Gorgas, formerly chief sanitary officer of the United States at Havana, and Dr. Giddings, representing the United States.

An International Congress of Ophthalmology will be held at Lucerne, Switzerland, in September, 1904.

At the conclusion of the meeting of the Iron and Steel Institute at Barrow-in-Furness. Mr. Charles Kirchhoff tendered on behalf of the American members of the institute an invitation to hold its next annual meeting in New York. The invitation, which was endorsed by the American Institute of Mining Engineers and other important bodies, was accepted on behalf of the institute by Mr. Andrew Carnegie. It is now proposed that the autumn meeting shall take place in New York on October 24, 25 and 26 next year. After the meeting there will be an excursion to Philadelphia, Washington, Pittsburg, Cleveland, Niagara Falls, Buffalo and the St. Louis Exposition, returning to New York on November 10. The institute had a similar trip in 1890.

An International Congress of School Hygiene will be held at Nuremberg, Germany, on April 4-9, 1904. All persons interested in this subject are eligible to membership, after approval by the local committee. There will be ten sections, as follows: (1) Hygiene of the school building and its appointments. (2) Hygiene of boarding schools. (3) Methods of hygienic research. (4) Hygiene of the mental education. (5) Hygienic instructions for masters and pupils. (6) Bodily training of pupils. (7) Illness, minor ailments, and medical attendance in schools. (8) Children of weak intellect, and schools for their benefit; courses for stutterers, for the blind, deaf and dumb; schools for cripples. (9) Hygiene of the scholars after school hours, holiday camps and organization of evening instruction in school-hygiene for parents. (10) Hygiene of the teachers. The American members of the committee are President Nicholas Murray Butler of Columbia University, Professor W. T. Porter of the Harvard Medical School, and Professor John A. Bergström of the University of Indiana.

THE Marconi Wireless Telegraph Company and Dr. Reginald Fessenden, are defendants in two suits for infringement instituted in the United States Circuit Court at Trenton, N. J., on October 5, by the International Wireless Telegraph Company. The plaintiff claims to have purchased from Professor A. Emerson Dolbear, Tufts College, patents for a system of wireless telegraphy granted on October 5, Professor Dolbear in an affidavit sets forth that he was the original inventor of the He charges that the Marconi Company has been aware of his patent rights and has been repeatedly warned that it was infring-The International Company seeks ing them. an injunction and damages.

THE Stockholm correspondent of the London Times writes that on September 14 the Swedish expedition in the Frithjof met the French expedition in the Français under Dr. Charcot at Funchal. A letter from a member of the Swedish expedition states that the French ship is very adequately fitted and that the laboratories are extremely well furnished with the best modern instruments. Charcot has placed himself and his ship at the disposal of Captain Gyldén, who is in charge of the Frithjof, and as there is some prospect that the Argentine vessel Uruguay may do the same, the relief expedition will be undertaken with three ships in constant communication with each other. Thus there seems every chance of bringing the expedition to a happy and expeditious issue. The Frithjof and the Français left Funchal together on the evening of September 16 en route for Buenos Ayres.

A REUTER telegram from Rio de Janeiro states that the Brazilian chamber has adopted the third reading of the bill to establish an international steerable balloon competition to be held at Rio in 1904, for a prize of 200 contos of reis. The scheme has been submitted to the senate.

On the recommendation of Rear Admiral Rae, chief of the Bureau of Steam Engineering, the secretary of the navy has appointed a board consisting of Capt. G. A. Converse, Commodore J. A. Perry and Lieutenant Cle-

land Davis, to report upon the subject of training of line officers of the navy in engineering. In the order constituting the board, the following instructions are given: The board will consider and report upon the subject of engineering instruction and training for officers of the line of the navy involved in the consolidation of the line and Engineering Corps by the Navy Personnel act of Congress of March 2, 1899. The board will report what plan it considers will best qualify officers for the efficient performance of engineering duties. The report will include the recommendations as to: First. The establishment of an engineering school for officers, its character, location, administration and government. In this connection the board will report as to the availability of the engineering experimental station at Annapolis for this purpose. Second. The period in their professional career in which officers should receive this instruction. The report will comprehend all details necessary to a complete understanding of this scheme or any other that the board may propose. The engineering instruction referred to should insure thoroughly efficient care, preservation and management of machinery afloat; but it is directed that the board also report upon the subject of further instruction in engineering for officers who evince a marked aptitude and interest in that branch of the profession and who choose to pursue that study as a specialty. The department desires the board to consider what measures should be adopted in order to insure a sufficient number of officers devoting their attention to engineering and whether the status of such officers shall differ in any respect from that of line officers in general in the corresponding grades.

WE learn from *Nature* that the Great Western Railway Company now offers facilities, in conjunction with the Swindon Education Committee, to their apprentices to enable them to gain technical scientific knowledge. A limited number of selected students may attend day classes at the technical school. They must have spent at least one year in the factory, and must have regularly attended for

at least one session in the preparatory group of evening classes at the technical school. The number of students must be limited to thirty at any one time. For each year's course there will be a competitive examination, successful students passing on from one year's course to the next. The course of study for each year will consist of practical mathematics, practical mechanics, geometrical and machine drawing, heat, electricity and chemistry. Those attending the classes will have their wages paid as if at work in the factory, and the Great Western Railway Company will pay their school fees. The students attending the day classes will be expected to give some time each evening to private study. Students who distinguish themselves will be allowed to spend part of their last year in the drawing office and chemical laboratory. The whole of the arrangements will at all times be under the direction of the chief mechanical engineer.

Dr. Henry M. Leipziger, supervisor of free lectures of the New York City Board of Education, says in his annual report: "The attendance at the scientific lectures is such as to show that the purpose of the lecture course should be to lay especial stress on popularization of science. The great need of our country is an increase in popular technical instruction, and the demand in our land for thoroughly trained workmen is always great. The intelligent workman should be thoroughly equipped in scientific principles, and the lecture course is one medium for giving that general information in scientific subjects which many mechanics lack. For this reason it is hoped that at no distant day two or three well-equipped science halls, where experiments can well be made, will form a feature of the educational plant of the city, and to these halls shall come the very ablest scientists to expound to the thinking people of our city the great principles of science, and elaborate on the great discoveries that are constantly being made. Such lectures will be of inestimable value in improving the intellectual condition of the workingman."

UNIVERSITY AND EDUCATIONAL NEWS.

Ground will be broken shortly at Leland Stanford Junior University for a new library building to be erected at a cost of over \$500,000. The building will be given to the university by Mrs. Stanford. It is said that she or Mr. Thomas Welton Stanford may also endow the library without drawing on the permanent funds of the university.

By the will of the late Frederick W. Guiteau, Cornell University receives \$100,000 and the residue of the estate, which it is said may amount to a considerable sum.

Mr. J. Ogden Armour, of Chicago, has endowed with \$100,000 a chair of orthopedic surgery in St. Joseph's Hospital, Omaha, Nebraska.

An appointment as assistant demonstrator of physiology in the Medical Department of the University of Pennsylvania is open for applications. The appointee will devote his mornings to laboratory teaching, his afternoons to research, and will receive a salary of \$500.

Dr. R. E. Hedrick, instructor in mathematics in the Sheffield Scientific School of Yale University, has been called to a chair in the University of Missouri.

Dr. Kenneth L. Mark, son of Professor E. L. Mark of Harvard University, has been appointed instructor in chemistry in Simmons College, Boston.

Dr. D. Hepburn, of the University of Edinburgh, has been appointed to the chair of anatomy in University College, Cardiff, vacant by the removal of Professor A. F. Dixon to Trinity College, Dublin.

At the Heriot-Watt College, Edinburgh, Mr. Roderick M. Shearer, M.A., B.Sc. (Edinburgh), has been appointed chief lecturer in mathematics; Mr. William C. Houston, B.Sc. (Glasgow), to be assistant professor of mechanical engineering; Mr. W. Mansergh Varley, B.A. (Cantab.), Ph.D. (Strasburg), to be assistant professor of physics and electrical engineering; and Dr. Bertram D. Steele, D.Sc. (London), McGill University, to be assistant professor of chemistry.