studio, as he wishes to exhibit it at the Royal Scottish Academy.

The long list of subscribers includes many of the leaders in physiology and other branches of medical science in this and other lands: a few of them may be named—Bayliss, Rose Bradford, Halliburton, L. Hill, MacWilliam, Mott, Starling, in Great Britain; and Hunter and Tait (Canada), Jolly (S. Africa), Malcolm and Mackenzie (New Zealand), Addis and S. Simpson (U. S. A.), Row (India), Itagaki and others (Japan). Among the original subscribers were two of great distinction who have unfortunately passed away—Augustus Waller and Benjamin Moore.

The profession will join in congratulating Sir Edward Sharpey Schafer on this spontaneous tribute from his old pupils and fellow workers to his eminence as a physiologist, and to the inspiration of his teaching, and also in the hope that he still has before him many years of successful work.

THE INTERNATIONAL CONFERENCE ON THE STANDARDIZATION OF SERUMS

DR. AUGUSTUS B. WADSWORTH, director of the division of laboratories and research of the New York State Department of Health, has returned to Albany from Paris, where he represented the Rockefeller Institute on the international committee appointed by the League of Nations to standardize serums for the treatment and prevention of pneumonia, meningitis, diphtheria and other diseases. Dr. Wadsworth makes the following statement in regard to the work of this committee:

The Second International Conference on the Standardization of Serums and Serological Tests of the Health Committee was held under the auspices of the League of Nations. November 20 to 26 inclusive, at the Pasteur Institute in Paris. Professor Theodore Madsen, president of the Health Section of the League of Nations, presided at the conference. Opening addresses were made by Dr. Roux, the discoverer of diphtheria toxin, and the French minister. It is noteworthy that the invitations were extended by the Pasteur Institute and that in the interests of science and humanity the representatives of nine different nations found common ground for this first meeting on French soil. We all shared and enjoyed alike the cordial hospitality of the French scientists.

Immediately after convening the members of the conference were assigned to committees to facilitate the business. Professor Jules Bordet, director of the Pasteur Institute in Brussels, was appointed chairman of the sub-committee on serological tests; Professor Louis Martin of the Pasteur Institute, of the sub-committee on the standardization of tetanus and diphtheria antitoxin; Professor Cantacuzene, of Bucharest, of the subcommittee on antidysentery serum; Professor Neufeld, director of the Robert Koch Institute in Berlin, of the sub-committee on antipneumococcus serum. I was assigned to three of the sub-committee on the standardization of antimeningococcus serum.

Progress toward international standardization of serums and serological tests is necessarily a slow one because of the differences in the methods that are used in the several countries, but for this reason the importance and practical value of the work is all the more apparent. Despite the many different points of view, the practical results from the free discussion were most encouraging. If such conferences can be repeated it is not difficult to understand that the ultimate results in improvement of methods used throughout the eivilized world will be of the greatest sig-' nificance for humanity.

SCIENTIFIC NOTES AND NEWS

DR. W. W. CAMPBELL, director of the Lick Observatory, Mount Hamilton, California, on January 4 was unanimously named president of the University of California by the University Board of Regents. He succeeds Dr. Davis Prescott Barrows at the end of the present college semester. The regents agreed to a proposal by Dr. Campbell that he remain as a director of the Lick Observatory as a "dollar a year" man. He will take office on July 1, when Dr. Barrows will become professor of political science.

DR. SAMUEL WESLEY STRATTON, director of the Bureau of Standards, was the guest of honor at a farewell reception at the bureau on December 14. The program included an exhibit of the work of the bureau and a visit to a number of the industrial laboratories. Dr.' Stratton was presented with a silver service' from the members of the staff.

PROFESSOR G. A. MILLER of the University of Illinois was reelected a member of the council of the American Association for the Advancement of Science at the Boston meeting, and Professor H. L. Fairchild of the University of Rochester was elected to the council. Dr. J. McKeen Cattell, editor of SCIENCE, and Dr. Henry B. Ward of the University of Illinois were reelected members of the executive committee of the council. Professor Frank Schlesinger, of Yale University, and Professor W. D. Harkins, of the University of Chicago, were chosen members of the committee on grants, which apportions the income of the association to advance scientific research, Professor Schlesinger being chosen to represent astronomy and mathematics, and Professor Harkins to represent chemistry.

PROFESSOR CHARLES E. MENDENHALL, of the University of Wisconsin, has been elected president of the American Physical Society for the year 1923 to succeed Professor Theodore Lyman, of Harvard University.

THE Ecological Society of America at the Boston meeting elected as its president, Dr. C. C. Adams, of the New York State College of Forestry, Syracuse, N. Y.; as vice-president, Dr. G. A. Pearson, of Fort Valley Experiment Station, Flagstaff, Ariz., and as secretarytreasurer, A. O. Weese of James Milliken University, Decatur, Ill.

DR. G. R. LYMAN, of the Bureau of Plant Industry, Washington, has been elected president of the American Phytopathological Society; Dr. F. D. Fromme, of the Virginia Agricultural Experiment Station, vice-president; and Dr. R. J. Haskell of the Department of Agriculture, Washington, secretary-treasurer.

THE Society of Economic Geologists elected at the annual meeting the following officers: J. E. Spurr of New York, *president*; Professor Andrew C. Lawson, of the University of California, *vice-president*; *directors*, Dr. L. C. Graton, of Harvard University; Dr. Ralph Arnold, of Los Angeles and New York, and Willet G. Miller, of Toronto, Canada.

AT the meeting of the Mineralogical Society of America held at Ann Arbor, Mich., on December 28, 29 and 30, the following officers were elected: For *president*, Dr. Edgar T. Wherry, Bureau of Chemistry, Washington, D. C.; for *vice-president*, Dr. George Frederick Kunz, New York City; for *secretary*, Frank R. Van Horn, Case School of Applied Science, Cleveland, O.; for *treasurer*, Albert B. Peck, University of Michigan, for *editor*, Walter F. Hunt, University of Michigan; for *councilor* 1923-26, Esper S. Larsen, U. S. Geological Survey, Washington, D. C.

THE Perkin medal of the New York Section of the American Chemical Society will be presented to Dr. Milton C. Whitaker, chemical engineer of New York City, at the regular meeting of the section at the Chemists' Club, on the evening of January 12. The following program has been arranged: "Introductory remarks," by Professor Ralph H. McKee; "Impressions," by Dr. A. A. Bachaus; "Whitaker and his Work," by Dr. Arthur D. Little; "Presentation," by Professor Charles F. Chandler; "Acceptance," by Dr. Milton D. Whitaker.

THROUGH an official representative Belgium has dedicated at Stanford University at Palo Alto, Calif., a bronze statue in recognition of the services rendered to that country during the war by Secretary Hoover, who is a graduate of the California institution.

PRINCE GELASIO CAETANI, an engineer by profession, has been appointed Italian Ambassador at Washington. A dinner has been planned in his honor by the American Engineering Council of the Federated American Engineering Societies in Washington on the evening of January 12.

DR. W. HELLPACH, professor of psychology at the Technological School at Karlsruhe, has been appointed *Kulturminister* for the state of Baden.

At a meeting of the court of the University of Leeds profound regret was expressed at the retirement of Professor Smithells, after thirty-seven years' service as head of the chemistry department, to devote himself to scientific investigation in London.

GENERAL C. G. BRUCE and Colonel E. L. Strutt, of the Mount Everest Expedition, were given an official reception on December 15 in the Sorbonne, Paris, by the French Geographical Society and the French Alpine Club.

Dr. N. H. DARTON, of the U. S. Geological Survey, has returned to Washington after nearly two years' field work completing the geologic map of Arizona for the State Bureau of Mines. While Mr. Darton was in Arizona the State University conferred on him the honorary degree of doctor of science in recognition of his work on the geology of the south-west.

DR. CHARLES LANE POOR, professor of celestial mechanics in Columbia University, has been granted leave of absence for the second half-year. In January Dr. Poor will sail for South America, where he will visit Arequipa and other observatories.

DR. E. S. HANDY, ethnologist and Mrs. Willomdean Chatterton Handy, associate in Polynesian folk ways of the Bishop Museum staff, left Honolulu early in January to continue their researches in Polynesian native culture. After a short stay in New Zealand they will proceed to Taluti, where their work for the present year will be centered.

E. A. S. CLARKE, lately president of the Consolidated Steel Corporation, has been elected secretary of the American Iron and Steel Institute.

JOHN MORRIS WEISS, until recently director of development of The Barrett Company, and Charles Raymond Downs, formerly chief chemist of the Barrett Company, and more recently engaged in special plant development work at the Buffalo plant of the National Aniline and Chemical Company, have formed a partnership as consulting chemists and chemical engineers with an office in the Chemists' Building, New York City.

THE seventeenth annual dinner and reunion of the Cornell Society of Engineers will be held at the Fifth Avenue Restaurant, 200 Fifth Avenue, New York, January 19. President Livingston Farrand and Dean Dexter S. Kimball will speak.

DR. BÉLA SCHICK, professor of pediatrics at the University of Vienna, will deliver the fifth Harvey Society Lecture at the New York Academy of Medicine on Saturday evening, January 27. His subject will be "The Prevention of Diphtheria."

THE Mann Juvenile Lectures of the Royal Society of Arts were delivered on January 3 and 10 by Mr. C. R. Darling who spoke on "The Spectrum, its colors, lines and invisible parts, and some of its industrial applications."

THE Swiney lectures on geology, twelve in number, in connection with the British Museum (Natural History), are being delivered at the Royal College of Science, South Kensington, by Professor T. J. Jehu, who has chosen as his subject "Fossils and what they teach."

THE centenary of the birth of Pasteur was celebrated by the Town and Gown Club, Austin, Texas, on the evening of December 21, 1922. The address on "Louis Pasteur, his life and his contributions to science and to humanity" was delivered by Dr. Henry Winston Harper, of the University of Texas.

A STATED meeting of the American Philosophical Society was held on Friday evening, January 5, in Philadelphia to commemorate the centenary of Louis Pasteur. Lawrence J. Henderson, M. D., professor of biological chemistry at Harvard University, delivered an address on "The Life and Services of Louis Pasteur."

A JOINT meeting of the New York Sections of the American Chemical Society and of the Société de Chimie Industrielle was held on January 5 at the Chemists' Club, New A special program was ar-York City. ranged commemorating the centenary of the birth of Louis Pasteur. Speakers were as follows: Professor Gary N. Calkins of Columbia University; "Pasteur and the Science of Fermentation," Professor John M. Nelson of Columbia University; "Pasteur and Chemical Asymmetry." Dr. John W. Churchman of Cornell University Medical School spoke on "The Selective Bacteriostatic Properties of Certain Dyes."

MRS. MABEL HUBBARD BELL, widow of Alexander Graham Bell, died on January 3 at the residence of her daughter, Mrs. David Fairchild at Chevy Chase, Md. Mrs. Bell never recovered from the shock of her husband's death last August. She became completely deaf after an attack of scarlet fever suffered at the age of three years. It was in part through this circumstance that Mr. Bell made the experiments on phonetics that resulted in the invention of the telephone, and it was with the cooperation of Mr. Hubbard, Mrs. Bell's father, that the practical development was carried out. It will also be remembered that Mr. Bell largely occupied himself with work for the relief of the deaf.

AT the second assembly of the League of Nations it was decided that cooperation among intellectuels in different countries of the world was a necessary step towards universal peace. and a Commission on Intellectual Cooperation was formed. A meeting of the three subcommittees of this commission, which includes, amongst others, Professor Einstein, Mme. Curie, Professor Bergson, M. Jules Destrée (former Belgian Minister for Science and Arts), and Professor Gilbert Murray, opened in Decem-The first sub-committee deals ber in Paris. with bibliography, and consists of Professor Bergson, Mme. Curie, and M. Destrée. Amongst others it has coopted Dr. Hagberg Wright (director of the London Library). One of its aims is to institute an international bibliographical bulletin and scientific review. It will also discuss the possibility of forming one or several large international libraries at which all books published in all countries will have to be deposited.

A MISSION of ten graduates of the engineering schools of Egypt has been sent to America by the Egyptian government to study manufacturing methods in this country. They have been placed in various factories by the Department of Commerce and will work as employees while they are acquiring a knowledge of American methods and machine-shop equipment.

DR. CARL SKUTTSBERG, director of the Botanical Garden, Gothenburg, Sweden, and Bishop Museum fellow in Yale University, has completed his field work in Hawaii. Under the guidance of Dr. H. L. Lyon and of other local scientific men, Dr. Skuttsberg made a survey of four islands, with special reference to a comparison of Hawaiian endemic types with those of Juan Fernandez islands and with Alpine flora. The results of his studies will appear among the publications of the Bishop Museum.

THE material collected at Palmyra Island and Kingman Reef by a party consisting of Lorrin A. Thurston, David Thanum, Manuel Vasconcellos and Theodore Dranga is said to be of considerable interest to students of the natural history of the Pacific. The primary purpose of the members of the expedition was obtaining sea shells for their private collections, but there were also obtained for the Bishop Museum representative series of crustacea and

echinoderms, some land shells and insects, and many species of fish, some of them new to science. A special study was made of the giant Coconut erab, *Birgus latro*.

DR. S. C. BALL and Professor C. H. Edmondson have submitted to the Bishop Museum a preliminary report of their expedition to Fanning Island, lying about 1,000 miles south of Hawaii. A fairly complete natural history survey of the island and its reefs was carried out. Marine crustacea and echinoderms were found in abundance and a considerable collection of marine molluses was obtained. The predominant terrestrial animal on all islands of the group is the land crab, Cardisoma carnifex, present in hundreds of thousands. One object of the visit was to secure specimens of the two land birds, a paroquet, Coriphylus kuhli, and a warbler, Tartare sp. The former was found abundant, but the latter less so. Skins and photographs of nine sea and shore birds living on Fanning were also secured. The party brought back 21 species of plants, 50 species of insects, in addition to fishes and lizards. There was little of ethnological interest to be The expedition was made possible obtained. through the courtesy of the Pacific Cable Board, which granted the use of the schooner H. M. S. Tangaroa (Captain Menmuir). The staff of the cable station and the officers of the local Copra Company contributed much to the success of the work.

THE Forest School of Yale University is the recipient of a valuable table from the Philippine Islands, the gift of the alumni of the school who are employed in the Philippine Forest Service. This table is of Narra wood, 5 feet by 18 feet in size. It was originally presented by the old Spanish Forestry Bureau, known as the Manila Botanical Garden, to the mayor and council of Manila in 1886. After the American occupation the table was used for some time by Governor General William Howard Taft. When Mr. Taft left, it passed into private hands and was recently acquired by the director of the Philippine Forest Service, Arthur F. Fischer, and other Yale alumni. The table is inlaid with an inscription in Camagon wood denoting its origin and disposition. Forty-six kinds of Philippine woods were used to manufacture the table; each sample is numbered and identified for addition to the school collection, which has for many years been the largest of its kind in the United States. The table will be used in the new forestry building, Sage Hall, the gift of William H. Sage, Yale, '65, which is being erected on Pierson-Sage Square and will be completed during the coming summer.

WITH a view toward putting temperance work in Japan on a sounder basis through the use of fact rather than opinion or sentiment. a chair of alcohol research is to be established at one of the Japanese universities. To this end Mr. Shyozo Aoki, of Tokyo, a retired merchant of Osaka, has established a foundation known as the Aoki Kyoseikae (Reform Society), granting to it the sum of 100,000 yen (\$50,000), to be used in placing in one of the universities of Japan a chair of alcohol research. This decision results from efforts of the American Association for Alcohol Research, founded in 1921 by Captain Richmond P. Hobson, now seeking a similar endowment for a chair of alcohol research in an American university.

A DESPATCH from Toronto to the London *Times* reports that Sir Robert Falconer, president of the University of Toronto, in answer to British criticism, says that "insulin," the recently discovered gland extract for use in the treatment of diabetes, has been patented for one reason only-the protection of the public. It is a means of making certain that the extract will always be of proper strength for effective use. Professor Macleod, for the medical faculty, explains that if the university had not patented "insulin," some commercial company would have done so, and obtained a monopoly. "The holding of the patents has already justified itself in permitting the university to undertake large-scale production so as to work out thoroughly satisfactory methods for the production of uniform potency and minimum toxicity." The university authorities hope that "insulin" will be freely supplied to physicians in general practice early next year.

THE Department of Commerce announces that the compilations made by the Bureau of the Census show that 1,032,009 deaths occurred in 1921 within the death registration area of continental United States, representing a death rate of 11.6 per 1,000 population as com-

pared with 13.1 in 1920. The rate for 1921 is the lowest rate recorded in any year since the beginning of the annual compilations in 1900. The death registration area (exclusive of the Territory of Hawaii) in 1921 comprised 34 states, the District of Columbia, and 16 cities in non registration states, with a total estimated population on July 1 of 88,667,662, or 82.2 per cent. of the estimated population of the United States. The death rate from cancer increased from 83.4 per 100,000 in 1920 to 86 in 1921. Some of the other diseases for which the rates increased are diphtheria, typhoid fever, appendicitis, scarlet fever, diabetes and puerperal fever. The fatalities caused by automobile accidents and injuries show an in crease from 10.4 per 100,000 in 1920 to 11.5 in 1921. A marked decrease is shown in the death rate from tuberculosis, which was 99.4 in 1921 as compared with 114.2 in 1920; also in the death rate from influenza and pneumonia (all forms) which was 99.8 in 1921 against 208.3 in 1920. The rates for measles, nephritis, bronchitis, whooping cough, heart disease and diarrhea and enteritis also declined.

THE first meeting in the interest of applied psychology, held in Berlin recently, was organized by the group for applied psychology, made up of members of the Gesellchaft für experimentelle Psychologie. The correspondent of the Journal of the American Medical Association reports that of the many fields of application of psychology, only one was considered at this meeting; namely, industrial or vocational psychology, which, dealing with psychotechnical procedures for establishing experimentally the qualifications of applicants for industrial positions, has awakened, since the war. marked public interest. During the intervals between transactions, opportunity was given to inspect the psychotechnical apparatus of various industrial plants. The first part of the session was devoted to the exhibition of the many psychotechnical methods used in establishing various findings of industrial significance. At the close of the session, a resolution was adopted to the effect that all persons who, in an official capacity, have to do with vocational guidance should accord to psychology the important place it deserves.

THE Boston Transcript writes: "Colonel E.

Lester Jones, director of the Coast and Geodetic Survey, wanted the modest sum of \$40,000 to enable him to complete wire drag work on the North Atlantic seaboard. General Lord, director of the budget, cut the item out of the appropriation bill, and now Representative Shreve, of Pennsylvania, chairman of a subcommittee on appropriations, declares himself incapable of overriding the decision of General Lord. This means that unless the maritime interests can bring sufficient pressure to bear on the committee on appropriations or General Lord or both wire-drag work extending practically from Newburyport along the Maine coast to the Canadian line must be abandoned. The Coast Survey has performed a remarkable service in clearing coastal waters of the boulders which infest them, most of them unknown, and yet many almost directly in the path of coastwise shipping. It will be recalled that a few years ago off Boston harbor one of the great battleships came within something like fifteen feet of striking a hidden rock that might easily have torn her side open and let her go down into one hundred feet of water. A little later it was necessary to wire drag Salem harbor to permit the entrance of another battleship, and twenty-five boulders were removed during the process. The work had proceeded as far as Newburyport harbor, and Colonel Jones estimated that with the new and improved drags he is using \$40,000 would enable him to clear the whole American coast. The work must be done eventually, and the appropriation officials may have a hard time explaining why it is being delayed."

UNIVERSITY AND EDUCATIONAL NOTES

THE Philadelphia College of Pharmacy and Science is endeavoring to raise \$2,000,000 for expansion of its work, and has already raised the sum necessary for a building site, which has been purchased. It is planned to use the \$2,000,000 for a group of buildings, with equipment, and in providing an adequate endowment. Rear Admiral W. C. Braisted, formerly surgeon general of the Navy, is the president of the college.

BATES COLLEGE has received an anonymous

gift of \$60,000 toward its million-dollar endowment fund. Including the \$200,000 conditionally promised by the General Education Board, this brings the fund total to \$550,000.

THE University of Glasgow has received a gift of £25,500 from Mr. Henry Mechan, of Mechans, Limited, engineers and contractors, Glasgow, for the foundation of a new chair of public health.

On the death, recently, of Mr. Gemmell, brother of the late Dr. Samson Gemmell, regius professor of medicine in the University of Glasgow, the fortune which passed to him on the death of Dr. Gemmell, amounting to approximately £100,000, has been bequeathed to various Glasgow institutions. The sum of £20,000 is left to the trustees of the university for the purpose of endowing a chair in the faculty of medicine or science, to be known as the Samson Gemmell chair. The choice of subject is left to the trustees.

AT Clark University Assistant Professor C. E. Melville has been promoted to a full professorship of mathematics.

DR. A. E. YOUNG, professor of mathematics at Miami University, has resigned to accept position with the Standard Oil Company at Pittsburgh.

DR. HUGH S. TAYLOR has been promoted by the trustees of Princeton University to a full professorship in the department of chemistry, with the title of professor of physical chemistry.

W. W. RUBEY, assistant geologist of the U. S. Geological Survey, has been granted leave of absence to accept an instructorshipat Yale University for the current year.

DISCUSSION AND CORRESPOND-ENCE

A PROPOSAL FOR WILD PLANT CON-SERVATION

The state of Vermont, well noted for rareplants—ferns and flowers—in considerable abundance, recently awoke to the fact that its flora was threatened with extinction. Plants formerly abundant were becoming rare and some rare plants were disappearing from localities where they had been fairly frequent. This applied particularly to various species