of the world appearing in 17 languages in 37 countries which are received in the Engineering Societies Library. The index items will be printed on cards and mailed weekly to the subscribers to the new service. This project was authorized by the American Society of Mechanical Engineers' council at its St. Louis meeting on October 8, 1927, as an important extension of the *Engineering Index* in its service to research and the development of industry and to bring to every one, not only in the United States but to any in the world, the storehouse of knowledge appearing in the technical literature of the world.

The American Society of Mechanical Engineers has published the Engineering Index since 1919, when it was taken over from the Engineering Magazine. During the eight years this book has been published by the society, its volume of material has increased from approximately 8,000 items annually to 16,000. These were first published monthly in Mechanical Engineering and at the end of the year collated in an annual volume. In the limited scope of a book of this kind it is possible to give only an incomplete service, while the modern needs of industry demand complete information about published technical material throughout the world and require it promptly. Accordingly, the new scheme was developed to meet this demand.

This service is made possible by the cooperation of the library board of the United Engineering Society Library and, in addition to the augmented technical staff of the society, the especially trained group of librarians who have on file the magazines to be indexed and who are prepared to furnish photostat copies and translations of foreign articles to those requiring them.

The new service will be under the general supervision of the committee on publications of the society, of which Ralph E. Flanders is chairman, and the finance committee, under the chairmanship of H. V. Coes. Professor Carlos deZafra, of New York University, will occupy the post of director of *The Engineering Index*.

THE COMMISSION FOR RELIEF IN BELGIUM FELLOWSHIPS

THIRTY-THREE Belgian advanced and graduate students will study in America during the whole or a part of the year 1927–1928 as holders of fellowships under the auspices of the Commission for Relief in Belgium Educational Foundation, 42 Broadway, New York. Three American fellows are at present in Belgium for a full year of advanced work.

The distribution of fellows in the field of science and their subjects of post-graduate study are as follows:

Harvard University: in neurology, Dr. Jacques De-Busscher.

- Massachusetts Institute of Technology: in metallurgy, Marcel Allinckx; in electrical engineering, Leopold De-Beer; in automotive engineering, Paul DePermentier; in hydraulic engineering, John L. Eeman; in aeronautics, Frits P. Malschaert.
- Stanford University: in electrical engineering, Carl L. DeBrouwer (honorary fellow); in economic geology, Robert DeStrycker; in geology, Joseph Donnay; in electrochemistry, Pierre van Rysselberge.
- University of California: in physiology, Dr. Lucien Brouha; in chemistry, Yvonne Lieben; in bacteriology, Dr. Jeanne Lommel.
- Columbia University: in psychology, Dr. Simone Ghisoland; in radio-activity, Dr. Suzanne Simon.
- Western Reserve University: in pharmacology, Dr. Corneille Heymans; in physiology, Dr. Pierre Rijlant.
- Yale University: in chemistry and hygiene, Dr. Francois Schoofs; in embryology, Dr. Ernest Van Campenhout.
- California Institute of Technology: in physics, Willy Uyterhoeven.
- Carnegie Institute of Technology: in steel industry, Joseph DeWez.
- Cornell University: in thermodynamics, Albert DeSmaele. Rockefeller Institute: in respiratory diseases, Dr. Pierre Denvs.
- Special Investigations and Travel: in bacteriology, Professor Richard Bruynoghe; in Greek archeology, Hubert Philippart.

The Americans in Belgium include Dr. George Sauté, of Harvard University, in mathematics.

Each fellowship provides full traveling expenses, payment of tuition fees and a limited stipend for living expenses. This fellowship exchange began in 1920 and, in all, 73 American and 218 Belgian fellows have been appointed. The fellowships were established to commemorate the war-time relief work of the Commission for Relief in Belgium and to promote the exchange of intellectual ideas and good-will between Belgium and America.

SCIENTIFIC NOTES AND NEWS

DR. THOMAS BARBOUR, curator of reptiles and amphibians in the museum of comparative zoology at Harvard University, has been appointed director of the museum to succeed Dr. Samuel Henshaw, who recently resigned after serving for twenty-three years.

DR. GEORGE K. BURGESS, director of the U. S. Bureau of Standards, has returned from Paris, where he officially represented the United States at the Seventh International Conference on Weights and Measures.

DR. HAVEN EMERSON, professor of public health administration in the College of Physicians and Surgeons, Columbia University, is to give a series of lectures during the week of November 28 to December 3 in London, at the invitation of the health section of the League of Nations. The topics of his lectures will be, "Epidemiology in Non-communicable Diseases," "The American Program for the Prevention of Heart Disease" and "Diabetes Mortality from the Public Health Point of View."

ON the occasion of the formal opening of the new medical school and clinics at the University of Chicago on October 31 the honorary degree of doctor of science was conferred upon Dr. Frank Billings, emeritus professor of medicine in the university; Dr. Rufus Cole, director of the hospital of the Rockefeller Institute; Dr. William S. Thayer, professor emeritus of medicine at the Johns Hopkins University, and Dr. Karl Landsteiner, of the Rockefeller Institute.

THE International Urological Congress, meeting in Brussels, conferred upon Dr. Edwin Beer, visiting surgeon at Bellevue Hospital, New York City, the first award of its gold medal for the introduction of a new method of curing bladder tumors by high frequency currents.

THE Baly medal of the Royal College of Physicians, England, was presented on October 18 to Dr. A. V. Hill, Foulerton professor of physiology at University College, London.

THE Compton medal of the Institution of Automobile Engineers has been awarded to H. R. Ricardo for his paper entitled "Some Notes on Petrol-Engine Development."

AT the annual meeting of the Royal Society of Edinburgh, held on October 24, the following officers and members of council were elected: *President*, Sir James Ewing; *General secretary*, Professor R. A. Sampson; *Treasurer*, Dr. J. Watt; *Curator of Library* and Museum, Professor D'Arcy W. Thompson; *Coun*cillors, Professor G. Barger, Mr. J. Bartholomew, Professor C. G. Darwin, Professor D. Waterston, Mr. J. W. Peck, Dr. J. Ritchie, Professor R. Stanfield, Dr. A. L. Turner, Dr. G. W. Tyrrell, Professor J. H. Ashworth, the Hon. Lord Constable, Professor E. Taylor Jones.

SIR WILLIAM LARKE, director of the National Federation of Iron and Steel Manufacturers, has been appointed a member of the advisory council to the committee of the Privy Council for Scientific and Industrial Research.

PROFESSOR A. L. KROEBER, chairman of the department of anthropology at the University of California, has been named faculty research lecturer for 1928. The faculty research lecturer is selected each year by a faculty committee from among those connected with the university who have contributed most to science during the previous year, or who have concluded some particularly interesting piece of work.

DR. WILLIAM TOWNSEND PORTER, professor of comparative physiology in the Harvard Medical School, has been made professor emeritus.

H. A. MARMER, of the U. S. Coast and Geodetic Survey, has been appointed a member of the committee on tides of the International Geodetic and Geophysical Union.

DR. GEORGE GRANT MACCURDY, of Yale University, has been chosen as one of the seven foreign patrons of the newly established Prehistoric Society of Moroeco. Dr. MacCurdy returned to New Haven in October after a summer in Europe directing the work of the American School of Prehistoric Research.

JOHN A. COMSTOCK has been appointed acting director of the Los Angeles Museum and will serve in this capacity during the absence, in Europe, of William Alanson Bryan.

GEORGE B. WATKINS has resigned his position as instructor of chemical engineering at the University of Michigan, to accept a position as chemical engineer in the research department of the Libbey-Owens Sheet Glass Company, Toledo, Ohio.

DR. CLARENCE E. KOBUSKI has been appointed assistant at the Arnold Arboretum of Harvard University.

DR. GEORGE E. BREWER, professor emeritus of surgery at Columbia University, sailed from the United States on October 15 for Europe, where he expects to spend the year in anthropological study.

DR. IMMANUEL FRIEDLANDER, director of the Vulcanological Laboratory at Naples, Italy, is visiting the United States.

DR. DAVID LINDER, instructor of botany in Washington University and mycologist to the Missouri Botanical Garden, after a year's leave of absence in Africa, has returned to this country and has taken up his work in Washington University and the garden,

DR. LEOPOLD HERRY, director of the Central Electrique des Flanders at Langerbrugge, and Dr. I. J. Moltkehansen, well-known Norwegian electrometallurgist, and Consul Honaire de France, Brussels, who accompanied the American Electrochemical Society on its industrial trip through the Northwest and later visited many important universities and research laboratories in the East, have sailed for Belgium.

DR. FELIX DEUTSCH, head of the Allgemeine Elektrizitäts-Gesellschaft, sailed for home on November 2, following a short visit to the United States. DR. SVEN INGVAR, docent in neurology at the University of Lund, Sweden, gave three lectures on the Herter Foundation at the Johns Hopkins University on November 3, 4 and 5. His subjects were "The Cerebellum: its Structure and Function" and "Pathogenesis of Argyll-Robertson Phenomenon."

DR. RAOUL BLANCHARD, professor of geography at the University of Grenoble, offered a series of lectures on "Human Geography of High Mountains" and a series on "Urban Geography" at the school of geography in Clark University during the month of October. Dr. C. F. Marbut, director of the U. S. Bureau of Soils, is at present lecturing at the school on the "Origin and Development of Soils in the United States." Dr. Frederick Starr, professor emeritus of anthropology at the University of Chicago, will give a series of four illustrated lectures on Japan at the university during the week beginning November 14.

DR. I. SNAPPER, professor of pharmacology and general pathology, University of Amsterdam, addressed the University of Wisconsin Medical School on November 1 on "Non-excretory Functions of the Kidney."

THE Westbrook lectures for 1928 of the Wagner Free Institute of Science, Philadelphia, will be given in March by Dr. Dayton C. Miller, of the Case School of Applied Science, on "The Science of Musical Sounds." Four lectures will be given.

DR. FRANK C. MANN, director of the division of experimental surgery and pathology at the Mayo Clinic and Mayo Foundation, Rochester, Minn., will deliver the second Harvey Society lecture at the New York Academy of Medicine on Friday evening, December 9. His subject will be "The Relation of the Liver to Metabolism."

PROFESSOR JAMES KENDALL, of the department of chemistry, Washington Square College, New York University, addressed the Philadelphia section of the American Chemical Society on October 20, on "The Abuse of Water." The same lecture was delivered before the department of chemistry of Mt. Holyoke College, on October 28.

DR. THORNE M. CARPENTER, chief chemist and vicedirector of the Nutrition Laboratory of the Carnegie Institution of Washington, delivered a lecture at the University of Missouri on October 31, under the joint auspices of the Society of Sigma Xi and the American Chemical Society on the subject "The Carnegie Nutrition Laboratory and its Recent Studies in Metabolism."

H. E. HOWE, editor of *Industrial and Engineering* Chemistry, during the month of October spoke before the Southern Appalachian Power Conference in Chattanooga, Tenn.; the Institute of American Meat Packers in Chicago, Ill.; the Kiwanis Club of York, Pa.; the Chemists' Club of Chicago, and the Milwaukee section of the American Chemical Society.

DR. W. F. G. SWANN, formerly professor of physics at Yale University and now director of the Bartol Research Foundation of the Franklin Institute, delivered the founders' day address at Swarthmore College on October 29.

THE Thomas Hawksley lecture of the British Institution of Mechanical Engineers, on "Application of X-rays to the Study of the Crystalline Structure of Materials," was delivered by Sir William Bragg, on November 4.

AN effort is being made by the Southwark Borough Council to commemorate Michael Faraday, who, the son of a blacksmith, was born in Southwark, England. The purpose of the council is to establish a Faraday memorial collection in the central reference library. The collection will consist of the biographies, portraits and published works of Faraday, and the best and latest books on the sciences and their applications, particularly electricity, with which Faraday's name is identified. It is purposed to establish a Faraday memorial fund, the annual income from which will be expended each year under the direction of a special committee, exclusively for the purpose in view.

DR. WILLIAM R. ORNDORFF, professor of organic chemistry at Cornell University, died on November 1, aged sixty-five years.

DR. JOHN C. WARREN, professor emeritus of surgery at the Harvard Medical School, died on November 4, in his eighty-sixth year.

H. M. TAYLOR, F.R.S., senior fellow and formerly mathematical lecturer of Trinity College, Cambridge, distinguished by his contributions to mathematical science, died on October 16, at eighty-five years of age.

DR. J. W. MOLLISON, formerly inspector-general of agriculture in India and who was the first head of the Imperial Agricultural Research Institute at Pusa, died on October 4, aged seventy years.

PROFESSOR MAX VON GRÜBER, president of the Bavarian Academy of Sciences and formerly head of the department of hygiene at the University of Munich, died on September 16.

PROFESSOR HANS LEO, head of the department of pharmacology at the University of Bonn, has died, aged seventy-four years.

THE United States Civil Service Commission states that the position of professor of chemistry at the Hygienic Laboratory, Public Health Service, Treasury Department, is vacant, and that, in view of the importance of the position in the field of medical, chemical and public health research, and to insure the appointment of a thoroughly qualified man for the work, the qualifications of candidates will be passed upon by a special board of examiners, composed of Dr. G. W. McCoy, director of the Hygienic Laboratory; Dr. Charles L. Parsons, chemical engineer, Mills Building, Washington, D. C.; Dr. Julius Stieglitz, head of the department of chemistry, University of Chicago: Dr. Charles H. Herty, Chemical Foundation, New York City; Dr. Reid Hunt, Harvard Medical School, and A. S. Ernest, examiner of the United States Civil Service Commission, who will act as chairman of the committee. The duties of this position will consist of planning, conducting and supervising researches in the field of chemistry as it relates to the public health. The incumbent will have full charge, as chief, of the Division of Chemistry and as such will be responsible for the administration, personnel and scientific work of that division. The entrance salary of this position is \$6,000 a year.

THE Maryland section of the American Chemical Society will act as host to the Washington, Philadelphia, Virginia, Delaware and South Jersey sections at an intersectional meeting to be held at the University of Maryland on November 26. At that time the university's newly-erected chemistry building will be dedicated. The new laboratory is a four-story structure, erected at a cost of \$250,000. Additional funds for the purchase of furniture and equipment have been donated by friends of the institution as follows: Organic, Dr. H. A. B. Dunning, of Hynson, Westcott and Dunning; Analytical, Dr. Samuel W. Wiley, of Wiley and Company, Inc.; General Chemistry, Dr. and Mrs. M. L. Turner; Physical, Dr. Alfred R. L. Dohme, of Sharpe and Dohme; Colloid, Mr. C. G. Campbell, of the Kewaunee Manufacturing Company; Industrial, The Chemical Alumni of the University of Maryland. The dedicatory exercises, to which the public is invited, will be held at 10:00 A. M. Dr. Edgar F. Smith, of the University of Pennsylvania, will be the principal speaker. A special luncheon has been arranged. The afternoon session will be devoted to the intersectional program. A series of papers have been arranged under each of the following sections: Physical and inorganic, organic and biological, industrial and agricultural and the chemical education. Dr. C. H. Herty will deliver an address at an informal dinner which will be held in the evening. It is essential that the committee know, not later than November 18, how many plan to be present. It is desired that those attending the meeting notify Dr. N. E. Gordon, University of Maryland, College Park, Md.

ACCORDING to *Museum News* the Mid-West Museums Conference is to hold its annual meeting at St. Paul and Minneapolis on November 18 and 19. One of the features of the sessions will be the joining in of the newly formed Michigan-Indiana Museums Association. This group was organized at a meeting held at the Chamberlain Memorial Museum, Three Oaks, Michigan. Announcement of intentions to affiliate themselves with the Mid-West Conference was made by the organizers and the newly elected officers. George R. Fox, director of the Chamberlain Museum, was elected president of the new association. Edward M. Brigham, curator of the Museum of Natural History of the Battle Creek Public Schools, was named secretary.

WOMEN planning to attend the meetings of the American Association for the Advancement of Science will be interested in knowing that lodging can be obtained at the dormitory of the Peabody College for \$2.00 per day. The Peabody and Vanderbilt Universities will be used for the meetings and there are eating places near at hand. Application should be made to W. N. Porter, convention secretary, Chamber of Commerce, Nashville, Tennessee.

THE fiftieth anniversary of the American Society of Mechanical Engineers will be celebrated during the week beginning April 7, 1930. This date marks the anniversary of the organization meeting of the society which was held at Stevens Institute of Technology. While plans for the proposed celebration have not been completed, the tentative arrangement provides concurrently for an international engineering congress of outstanding nature which will not only mark the achievements of the engineering profession for the past fifty years, but will point the way for future growth and development. It is expected that this fiftieth anniversary meeting will be held in Washington, D. C., thus giving it a national and international character.

AT the invitation of the American Hospital Association, representatives of eleven countries met on September 19, at the League of Red Cross Societies in Paris, to discuss an international hospital convention. The meeting was composed of representatives from the International Council of Nurses and the League of Red Cross Societies, also representatives from Belgium, Czecho-Slovakia, Denmark, France, Great Britain, Hispana-America, Hungary, Italy, Mexico, Netherlands, Sweden and the United States. At this meeting it was decided that the first International Hospital Congress should meet in the United States in June, 1929, and that the invitations extended by various European eities be taken into consideration for the second congress.

THE Henry Herbert Wills Physics Laboratory, an imposing addition to the buildings of the University of Bristol, was formally declared open on October 21, by Sir Ernest Rutherford, president of the Royal Society. The laboratory is one of the finest and best equipped in the world. It stands on the Royal Fort Estate, overlooking the city. The late Mr. H. H. Wills was the donor, his gift amounting to £200,000. The opening ceremony took place in the main lecture theater of the laboratory, and the chancellor of the university, Lord Haldane, who presided, was supported by officers of the university and academic staff and by a group of distinguished physicists who visited Bristol for the occasion. Subsequently the chancellor admitted to the degree of doctor of science honoris causa Professor Max Born (Göttingen), Sir William Bragg (Royal Institution, London), Professor A. S. Eddington (Cambridge), Professor Alfred Fowler (Imperial College of Science and Technology, London), Professor P. Langevin (Paris) and Sir Ernest Rutherford (Cambridge).

A FIVE years' program of scientific studies in the physical chemistry of steel making to be carried out by the Carnegie Institute of Technology, the U.S. Bureau of Mines and an advisory board of Pittsburgh steel executives and metallurgists has been launched. Twenty-six steel companies located east of the Mississippi River will cooperate in the work. Pledges of support in undertaking the research program were given by 65 representatives of the 26 cooperating steel companies at a dinner given for them and members of the advisory board by President Thomas S. Baker at the Carnegie Institute of Technology on October 19. The dinner meeting was preceded by inspection in the afternoon of the metallurgical laboratories of the Bureau of Mines and the laboratories of the department of metallurgy and the bureau of metallurgical research at the Carnegie Institute of Technology. Speakers at the meeting included Dr. Thomas S. Baker, president of the Carnegie Institute of Technology; Dr. John Johnston, director of the department of research and technology, United States Steel Corporation; Scott Turner, director, U. S. Bureau of Mines, and Dr. C. H. Herty, Jr., head of the ferrous metallurgical section of the U.S. Bureau of Mines, who gave a progress report on the cooperative research.

THE Captain Marshall Field Brazilian Expedition, which left Chicago in June, 1926, ended with the return to the Field Museum of Natural History on October 27 of Colin C. Sanborn, the last of its members to remain in the field. The zoological section of the expedition originally included in its personnel, besides Mr. Sanborn, George K. Cherrie as leader, Mrs. Marshall Field, Curzon Taylor and Karl P. Schmidt. These other members returned at various times after completing the particular branches of the work they were interested in. They obtained for the museum 4,333 specimens of mammals, birds, reptiles, amphibians, fishes, insects and other creatures. The original expedition also had a botanical division in charge of Dr. B. E. Dahlgren, acting curator of botany, and a geological division headed by Henry W. Nichols, associate curator of geology, which obtained valuable collections for those departments of the museum.

UNIVERSITY AND EDUCATIONAL NOTES

AN anonymous gift of \$150,000 has been made to Princeton University for the establishment of a chair of geography to be known as the Knox Taylor professorship.

THE Harvard Medical School has been made the beneficiary of a sum amounting to \$150,000 by the will of the late William A. Purrington. The bequest is made "for research work in the field of medicine, with special reference to the application of medical knowledge to the department of dentistry."

DR. ERNEST SHAW REYNOLDS has been appointed professor of plant physiology in the Henry Shaw School of Botany of Washington University and physiologist to the Missouri Botanical Garden. Dr. J. M. Greenman, curator of the herbarium, Missouri Botanical Garden, and professor of botany in Washington University, has been placed in charge of graduate work in the Henry Shaw School of Botany. Dr. Roland V. L. La Garde has been appointed research assistant on the staff of the Missouri Botanical Garden.

RALPH L. SHRINER has resigned his position as associate in research at the New York Agricultural Experiment Station, Geneva, N. Y., to accept an assistant professorship in organic chemistry at the University of Illinois.

DR. CHARLES L. SWISHER, professor of physics at North Dakota College, and Dr. John E. Pomeroy, formerly of Bethany College, have been appointed assistant professors in the department of physics at Yale University.

DR. W. F. WENNER and Dr. L. A. Brown have been appointed to assistant professorships in zoology at the State University of Iowa.

Dr. MELVILLE J. HERSKOVITS, lecturer in anthropology at Columbia University, has joined the faculty of Northwestern University.

Dr. J. DUESBERG, professor of anatomy at the faculty of medicine of Liége, who, during the war, served