

Of interest also are the independent marine stations of Monaco and of Salammbô, Tunis.

The main provincial cities where biological research is being actively carried out are Strasbourg, Montpellier, Nancy, Lyon. In Strasbourg are Professors Bouin and Ancel, who have done remarkable work on the biology of sex; Nieloux and Blum, who have applied to biochemistry the methods of micro-chemistry; the physico-biologist, Vlès, the physiologist Terroine, the protozoologist Chatton, besides many younger able men. At Montpellier are the experimental zoologist Bataillon, the comparative anatomist Vialleton, the histologists Hollande and Turchini, and the physiologists Hédon and Derrien. At Nancy is the school formed by Professor Cuénot, leader of French geneticists, while at Lyon an outstanding figure is Professor Policart, physiological histologist.

In all the laboratories which have been enumerated, as well as in all other French research laboratories, foreign investigators are made welcome. American biologists coming to work in France should not, however, choose any laboratory in which to do their investigation before meeting the various directors personally. The various laboratories differ so much from each other, in both spirit and equipment, that it is far preferable to decide "sur place" which suits best one's particular needs.

The spirit of individualism and personal liberty, preeminent in France, is amply reflected in the life of its laboratories. Americans, accustomed to a system which has a tendency to over-organization in science, can greatly benefit from association with a method which is totally different from their own.

RAOUL M. MAY

AMERICAN FIELD SERVICE,
PARIS, FRANCE

SCIENTIFIC EVENTS

LECTURES AT THE ROYAL INSTITUTION

THE following lecture arrangements at the Royal Institution before Easter next year have been announced: The Christmas course of six lectures for juveniles were delivered by Professor A. V. Hill, on "Nerves and Muscles: how we feel and move," commencing on December 28. On Tuesdays, at 5.15 P. M., beginning on January 18, there will be two lectures by Professor R. Whytlaw-Gray on smokes as aerial disperse systems; six by Professor Julian Huxley on problems of animal growth and development; two by Dr. G. Shearer on X-rays and the chemical molecule, and two by Professor J. W. Cobb on some properties of coke. Thursday afternoon lectures, at the same hour, include three lectures by Sir William Bragg on acoustical problems treated by Lord Rayleigh; three by Professor John Garstang on the prog-

ress of Hittite studies; two by Mr. J. Guild on color measurement and standardization, and two by Mr. Harold J. E. Peake on the beginnings and early spread of agriculture. Saturday afternoon lectures, at 3 P. M., include four by Sir Ernest Rutherford on the α -rays and their application to atomic structure. The Friday evening meetings will begin on January 21, when Sir William Bragg will deliver a discourse on Tyndall's experiments on magne-crystalline action. Succeeding discourses will probably be given by Professor E. P. Cathcart, Mr. T. L. Eckersley, Dr. Ernest Law, Sir Josiah Stamp, Professor D'Arcy Thompson, Sir Herbert Jackson, Dr. George Macdonald, Mr. E. Hatschek, Professor C. T. R. Wilson, Sir Ernest Rutherford and others.

PUBLIC LECTURES AT THE HARVARD MEDICAL SCHOOL

THE faculty of medicine of Harvard University is offering a course of free public lectures on medical subjects, at the Medical School, Longwood Avenue, Boston, on Sunday afternoons at four o'clock, beginning on January 9 and ending March 27.

January 9.—*Healthy children.* Dr. Richard M. Smith, assistant professor of child hygiene.

January 16.—*The public health aspects of venereal diseases.* (To women only.) Dr. Myrtelle M. Canavan, curator of the Warren anatomical museum.

January 23.—*Alcoholism, syphilis, and some other conditions as causes of mental disease.* Dr. Harry C. Solomon, instructor in neuropathology and associate in psychiatry.

January 30.—*The dangers of overweight.* Dr. Lawrence T. Fairhall, instructor in physiology.

February 6.—*The internal secretions.* Dr. Joseph C. Aub, assistant professor of medicine.

February 13.—*Some causes of bladder trouble.* (To men only.) Dr. J. Dellinger Barney, assistant professor of genito-urinary surgery.

February 20.—*The problem child.* Dr. Douglas A. Thom, instructor in psychiatry.

February 27.—*How the nerves, eyes, nose and throat may be affected by the teeth.* Dr. George H. Wright, assistant professor of dentistry.

March 6.—*The meaning of blood pressure.* Dr. William H. Robey, assistant professor of medicine.

March 13.—*Fresh air, sunlight, and vitamins.* Dr. Edwin T. Wyman, instructor in pediatrics.

March 20.—*Something about dreams.* Dr. Percy G. Stiles, assistant professor of physiology.

March 27.—*Cancer and new growths.* Dr. Shields Warren, instructor in pathology.

GIFT OF THE ROEBLING MINERAL COLLECTION TO THE SMITHSONIAN INSTITUTION

WHAT is said to be the finest private collection of minerals in the world, belonging to the late Colonel

Washington A. Roebling, builder of the Brooklyn Bridge, has been given by his son, Mr. John A. Roebling, to the Smithsonian Institution. Accompanying the gift is an endowment of \$150,000 to insure the maintenance of the collection.

This gift makes the Smithsonian Institution the possessor of the two greatest private mineral cabinets in this country, received within two months of each other. The first, containing 9,000 specimens, which is only surpassed by the Roebling collection of 16,000 specimens, came from Mr. Frederick A. Canfield, of New Jersey. It is also endowed to the amount of \$50,000. These two gifts added to the 50,000 mineral specimens already owned by the Smithsonian put the institution ahead of any other in this country in mineralogical material, and class it with the British and Vienna Museums in the front of the world.

It has been claimed for the Roebling collection that it contains a greater number of species than any other, public or private, in the world. The number of well-defined species of minerals is about 1,500. Colonel Roebling lacked less than 15 of these. Included are an almost complete series of the varieties and of all dubious mineral species. In his attempt to get specimens of every known mineral, he kept an up-to-date list of desiderata, circulating copies of this among mineralogists and dealers in all corners of the globe.

The collection contains a number of rarities such as a 64 carat black diamond from South Africa. It is a perfect crystal and is believed to be one of the largest black diamond crystals known. A group of nine Arkansas diamonds contains one of 18 carats, which was, up till two years ago, the largest known from Arkansas. A black opal from Humboldt County, Nevada, weighs 18-6/10 ounces, being the largest precious opal known.

Among the cut stones there is a 319 carat peridot from the Island of Saint John in the Red Sea. It is supposed to have adorned the image of a saint in an Austrian church for some three centuries. A wine colored topaz from Brazil weighs 93 carats. An exceptional alexandrite of 32 carats from Ceylon shows green in sunlight and red in artificial light.

The finest group of precious tourmalines ever taken from Mesa Grande, California, are included in the Roebling collection. Maine contributed its finest purple apatite. A rare four carat cut blue euclase from Brazil is exceptional in color and size.

The collection contains many type specimens, which greatly enhance the scientific value of the cabinet, while the number of dubious minerals included will provide the Smithsonian mineralogists an opportunity to reinvestigate them and determine what they actually are.

REVISION OF THE U. S. PHARMACOPOEIA

SINCE the appearance of the tenth revision of the "Pharmacopoeia of the United States" the committee entrusted with the task of preparing this national standard has turned its attention to the problems that will arise in the preparation of the eleventh revision in 1930. Many revision problems involve extended research and the revision committee is hopeful that individual workers will take up these problems as a part of their regular research work.

A list of chemical problems has therefore been submitted to American chemists with the hope of interesting them in this field of research. Perhaps some of the problems are already being studied by certain chemists; perhaps others may interest individual chemists now looking around for a useful subject for research. In either event, it is desired that the person engaged in the specific research notify Chairman E. F. Cook, U. S. P. Revision Committee, 636 South Franklin Square, Philadelphia, Pa., or the chairman of the research group on chemistry, Dr. H. V. Arny, stating the topic of research taken up and when the research is finished either send in information as to where the article will be found, or better still, send in a reprint of the article. Copies of the list may be obtained by addressing the office of the general chairman.

The list of problems upon which information is desired has for convenience been classified under five divisions, each division having the corresponding members of the executive committee of revision, one member serving as chairman of the group. The divisions are as follows: (1) Committee on therapeutics and pharmacologic research, H. C. Wood, Jr., *chairman*, with C. W. Edmunds, George W. McCoy and Torold Sollmann; (2) committee on pharmacognostic research, Edwin L. Newcomb, *chairman*, with W. O. Richtmann; (3) committee on chemical research, H. V. Arny, *chairman*, with Frank R. Eldred, Charles H. LaWall, W. O. Richtmann and George D. Rosengarten; (4) committee on pharmaceutical formulas and processes, Wilbur L. Scoville, *chairman*, with George M. Beringer and Jacob Diner; (5) committee on miscellaneous research topics, A. G. DuMez, *chairman*, with Theodore J. Bradley.

NEW LABORATORY OF ENGINEERING FOR LEHIGH UNIVERSITY

A GIFT of a million dollars for the erection of an electrical and mechanical engineering laboratory at Lehigh University by James Ward Packard, a graduate of the class of 1884 and originator of the Packard automobile, was announced at a meeting of the board of trustees of Lehigh University on January 14. The