

These simple arrangements should provide a permanent and experienced financial management of the principal or capital account with a permanent and competent scientific management of the expenditure of the income, both of which should be readily adaptable to changes in the investment or scientific situation.

The amount currently available for disbursement is estimated at about \$2,700 a year, and may be expected to increase as benefactors of science come to appreciate the advantages of the Permanent Science Fund as a depository of gifts.

Applications for grants-in-aid should be addressed to the Committee on the Permanent Science Fund, American Academy of Arts and Sciences, 28 Newbury Street, Boston, Mass.

EDWIN B. WILSON

PSYCHIATRY AND MENTAL HYGIENE IN YALE SCHOOL OF MEDICINE

THE appointment of Dr. Eugen Kahn, of Munich, Germany, as professor of psychiatry and mental hygiene in the Yale School of Medicine is announced by President James Rowland Angell.

Dr. Kahn studied at Heidelberg, Munich and Berlin, where he interested himself primarily in the fundamental sciences which deal with the nervous system. For many years he worked under the late Emil Kraepelin, the noted psychiatrist, in whose honor the Rockefeller Foundation in 1928 presented a building to the German Psychiatric Research Institute in Munich, a unit of the Kaiser Wilhelm Institut, recognized as the foremost organization in that country for the promotion of scientific research. When Dr. Kraepelin decided in 1925 to give his whole time to the Psychiatric Institute, which he had founded, he left the active direction of the psychiatric and nerve clinic of the University of Munich to Dr. Kahn, who has since been professor in that clinic.

Dr. Kahn is among the first to be appointed in connection with the program for developing the study of psychiatry and mental hygiene at Yale. Early in 1929 the Rockefeller Foundation pledged \$100,000 a year for ten years to develop this program, and in addition provided the funds for the Institute of Human Relations building, now under construction, in which the department will be housed. For the development of the mental hygiene aspects of the program the Commonwealth Fund is making an annual allowance of \$50,000.

Dr. Kahn recently spent several weeks in New Haven studying the plans and will return in March to assist in equipping the institute building for the work in psychiatry. The building will have facilities for the care of fifty individuals who will be studied from the point of view of their mental economy. Some of these will be of inferior mentality while others will be average and superior. The keynote of the work will be the prevention of mental disease by tracing it in all its forms to the contributing factors and origins.

Associated with Dr. Kahn will be Dr. Lloyd J. Thompson as resident and chief of staff; Dr. Edgar Van Norman Emery, former chief of the Los Angeles child guidance clinic; Dr. C. C. Fry, who is consultant and adviser for university students, and others to represent the varied interests of the institute.

According to Dean M. C. Winternitz, of the Yale School of Medicine, the work in the department of psychiatry and mental hygiene will rest upon the fundamental fields of neuro-physiology, neuro-anatomy and neuro-pathology. These branches are being constantly strengthened by the addition of personnel and funds. In the clinical field the new department will be closely associated with the clinical departments now in existence in surgery, internal medicine, diseases of women and diseases of children.

SCIENTIFIC NOTES AND NEWS

AN Associated Press dispatch from Stockholm reports that the Nobel prize in physics for 1928 has been awarded to Professor Owen W. Richardson, King's College, London. Dr. Richardson was professor at Princeton University from 1906 to 1914. The prize in physics for 1929 has been awarded to the Duc de Broglie, of Paris. The prize in chemistry has been divided between Dr. Arthur Harden, head of the biochemical department of the Lister Institute and professor of biochemistry in the University of London, and Dr. Hans von Euler, professor of biochemistry in the University of Upsala. As already announced in *SCIENCE* the prize in medicine has been divided between Dr. Frederick Gowland Hopkins, pro-

fessor of biochemistry at the University of Cambridge, and Dr. C. Eijkmann, professor of hygiene and legal medicine at the University of Utrecht.

ACCORDING to the *Journal* of the American Medical Association the French government has awarded a gold medal in honor of the researches made on infectious diseases by the late Dr. Hideyo Noguchi, of the Rockefeller Institute for Medical Research, who died in Africa during his studies on yellow fever. The medal was given to his nephew on August 26, through the department of foreign affairs.

DR. FLORENCE RENA SABIN, member of the Rockefeller Institute for Medical Research since 1925 and

previously professor of histology in the Johns Hopkins Medical School, has been awarded the *Pictorial Review* prize for the most distinguished contribution by an American woman to American life in art, letters or science. Dr. Sabin will receive the award of \$5,000 at a luncheon to be given in her honor.

THE University of Strasbourg has conferred an honorary doctorate on Professor Harvey Cushing, Moseley professor of surgery in the Harvard Medical School and surgeon-in-chief at the Peter Bent Brigham Hospital.

DR. MAX RUBNER, professor of hygiene and physiology in the University of Berlin, has been elected an honorary member of the Physiological Society, London.

THOMAS A. EDISON was the guest of honor at the one hundred and sixty-first annual dinner of the New York State Chamber of Commerce in the Hotel Astor on November 21. A portrait was unveiled which later will be placed in the gallery of the chamber in its building. Among the speakers were Dr. Benjamin M. Anderson, Jr., economist of the Chase National Bank, and Dr. Simon Flexner, director of the Rockefeller Institute for Medical Research.

GULIAN PICKERING RIXFORD applied on September 21 for retirement from his position of plant physiologist in the office of horticultural crops and diseases, Bureau of Plant Industry, on the date on which he celebrated his ninety-first birthday. Mr. Rixford entered the service of the United States Department of Agriculture in 1908 in connection with the distribution of Smyrna figs and caprifigs, the introduction of the pistache nut into commercial culture, and the study of miscellaneous subtropical crop plants. He was then seventy years of age, but his extraordinary physical vigor is illustrated by the fact that in his twenty-one years of service in the office he has taken very little annual leave and practically no sick leave until the past summer when a field trip during one of the intensely hot spells of weather proved a little too much for his strength.

Nature reports that at the annual meeting of the Royal Society of Edinburgh, held on October 28, the following officers were elected: *President*: Professor Sir E. A. Sharpey-Schafer; *Vice-presidents*: Emeritus Professor W. C. M'Intosh, Professor Sir Robert W. Philip, Professor J. Graham Kerr, Professor W. Wright Smith, Professor Francis G. Baily, Professor T. J. Jehu; *General Secretary*: Professor R. A. Sampson; *Secretaries to Ordinary Meetings*: Professor C. G. Darwin and Dr. James Ritchie; *Treasurer*: Dr. James Watt; *Curator of Library and Museum*: Professor D'Arcy W. Thompson; *Councillors*: Professor J. H. Ashworth, Professor E. Taylor Jones,

Dr. J. B. Clark, Professor F. A. E. Crew, Professor J. Montagu F. Drummond, Mr. D. A. Stevenson, Professor H. W. Turnbull, Emeritus Professor Sir James Walker, Dr. James Drever, Mr. A. H. R. Goldie, Dr. R. A. Houston, and the Honorable Lord Sands.

DR. MAX MASON, director of the natural science division of the Rockefeller Foundation, and formerly president of the University of Chicago, has been elected president of the Rockefeller Foundation. He will succeed Dr. George E. Vincent, who has been president of the foundation for the last twelve years.

DR. HARVEY N. DAVIS, president of Stevens Institute of Technology, has been appointed a manager of The American Society of Mechanical Engineers to fill the unexpired term of Mr. L. B. McMillan, who was killed on August 9 last in an airplane accident. Mr. Robert M. Gates has been designated to take Mr. McMillan's place as council representative on the finance committee of the society and also on the executive committee of the council.

DR. EATON M. MACKAY, formerly on the staff of Stanford University Medical School, will be in charge of the new physiological and chemical laboratory of the Scripps Metabolic Clinic, La Jolla, California.

THE *Journal* of the American Medical Association reports that Dr. Leverett D. Bristol, who, for the last six years has been director of health demonstrations for the Milbank Memorial Fund, has been appointed health director of the American Telephone and Telegraph Company with headquarters in New York. Recently, Dr. Bristol made a health survey of the Bell Telephone System in the United States and Canada. He was formerly commissioner of health in the State of Maine and professor of public health at the University of Minnesota.

DR. C. V. DRYSDALE, superintendent of the British Admiralty Research Laboratory, has been appointed director of the scientific research and experiments department of the admiralty. He succeeds Dr. F. E. Smith, who has taken up the appointment of secretary to the department of scientific and industrial research.

IN recognition of the value of a study of pure psychology to clinical psychiatry a department of psychology, under the directorship of Dr. James Drever, reader in psychology at the University of Edinburgh, has been instituted in connection with the Jordanburn Nerve Hospital; Dr. Drever will be assisted by Dr. Mary Collins and Dr. Fairbairn.

DR. P. H. ROLFS, who has been in Brazil for eight years, establishing an agricultural college for the state of Minas Geraes, on the North American plan, has recently returned after a vacation in the United States. He is now "consultor tecnico de agricultura"

for the same state, and will continue to reside in Viçosa. As already reported Dr. Rolfs has returned to Brazil. He was accompanied by three professors for the agricultural college which he established in Minas. A. O. Rhoad, B.S. (Penn. State), M.S. (Cornell), will have charge of the department of animal husbandry; A. S. Muller, B.S. (Cornell), will establish a department of plant pathology, and Mr. E. J. Hambleton, B.S. (Ohio University), M.S. (Cornell), will establish the work in entomology.

DR. K. LARK-HOROVITZ, director of the laboratory of physics of Purdue University, has returned from a three-months' trip to Europe, where he studied research problems of glass and its manufacture. He visited leading glass factories in Germany, England, Austria, Czecho-Slovakia, Hungary, Holland and France, and established connection between the research work on glass and refractories being conducted by the Purdue laboratory of physics.

GILBERT OTTLEY and H. E. Anthony have sailed for Mollendo, Peru, on an expedition for the American Museum of Natural History. This expedition is made possible through the financial assistance of Mr. Ottley. Mr. Anthony, curator of the department of mammals, is in charge of the expedition, and Mr. Ottley will assist in making collections of mammals, taking photographs and recording observations. The primary purpose of the trip is to make a biological reconnaissance through southern Peru, Bolivia, Chile, Argentina, Paraguay, Uruguay and southern Brazil.

EX-GOVERNOR GIFFORD PINCHOT and his party have returned after a seven-months' cruise on the yacht *Mary Pinchot*. Grand Cayman, Swan Island, Old Providence and St. Andrew were visited in the Caribbean, and in the Pacific, Cocos Island, the Galapagos, Marquesas and Tuamotus. Extensive collections of birds were made by Dr. A. K. Fisher, and of mollusks by Dr. Pilsbry. These will be studied at the National Museum and the Academy of Natural Sciences of Philadelphia. Numerous porpoises and reptiles were taken, and Mr. Pinchot secured valuable notes, material and photographs of the little known mantas or giant rays of the Galapagos and Marquesas.

PROFESSOR DOUGLAS JOHNSON, of Columbia University, who is spending a sabbatical year in geologic and geographic studies abroad, recently visited South Africa and Australia. In South Africa he participated in the International Geological Congress, presenting a paper on "The Geomorphic Aspect of Rift Valleys" at the Pretoria sessions, and delivered a public lecture on wave phenomena before the British Association at Cape Town. In Australia he spent several days in examining the coastal features in the

vicinity of Perth, then crossed the continent by rail with stops at Adelaide and Melbourne to see coastal and other phenomena of special interest. A four days' motor trip from Melbourne to Sydney gave opportunity to examine reported evidences of sea-level changes on the south-east coast. In Sydney Professor and Mrs. Johnson were guests of the state government on excursions to the Jenolan Caves and the Newcastle Coast, and on an inspection of Sydney harbor with a party of local geologists on the government launch *Premier*, as part of a program of excursions arranged by Professor Sir Edgworth David. On October 14 Professor Johnson gave an address on "Studies of Shoreline Physiography" at the rooms of the Linnaean Society in Sydney.

A COMMITTEE of five has been appointed by the American Association of Colleges of Pharmacy to consider a national educational policy with regard to the new four-year curriculum advocated by leading pharmacists of America. The members of the committee are Dr. Townes R. Leigh, dean of the University of Florida College of Pharmacy; Dr. Julius A. Koch, dean of the Pittsburgh College of Pharmacy; Dr. Edward H. Kraus, dean of the University of Michigan College of Pharmacy; Dr. Rufus A. Lyman, dean of the University of Nebraska College of Pharmacy, and Dr. H. C. Biddle, dean of the University of California College of Pharmacy.

A STUDY of 21 backward reclamation projects, according to the *U. S. Daily*, was continued by a committee of economists and government reclamation officials at a conference at Chicago on November 13. The committee, named to correlate reports from various reclamation projects and to draft recommendations for the enactment of legislation to aid these backward projects, met recently at Washington and the conference was continued at Chicago. The government was represented by the commissioner of the Reclamation Bureau, Dr. Elwood H. Mead; the director of reclamation economics, George C. Kreutzer, and the assistant director and secretary of the committee, Dr. Hugh A. Brown. Other members of the committee are Professor Frank Adams, University of California; Dean Anson Marston, University of Iowa; Dr. Charles A. Lowry, President, Colorado Agricultural College; Dr. Alvin Johnson, of New York, A. C. Cooley, office of demonstrations on reclamation projects, Department of Agriculture, and J. W. Haw, director of agriculture, Northern Pacific Railroad. Following the conference a report will be submitted to the Secretary of the Interior.

THE second series of public scientific lectures at the Carnegie Institute of Technology was given on No-

vember 20 and 21, by Dr. Clinton J. Davisson, research physicist of the Bell Telephone Laboratories, whose subject was "The Wave Properties of Electrons."

AN address was made on October 21 before the Yorkville, New York, Medical Society by Professor Elmer V. McCollum, of the Johns Hopkins University School of Hygiene and Public Health, on "Where We Stand Now in Our Knowledge of Nutrition." Those who discussed the paper were Dr. Alfred F. Hess, Dr. Henry C. Sherman, Dr. Carl Sherwin and Dr. Walter H. Eddy.

PROFESSOR HARLOW SHAPLEY, director of the Harvard College Observatory, is delivering a series of five lectures at the College of the City of New York on successive Wednesdays. The dates and titles of the lectures are: November 20—"On the Kinds of Things"; November 27—"The Microcosmos"; December 4—"Concerning Planets"; December 11—"To the Bounds of the Galaxy and Beyond"; December 18—"The Cosmoplasma."

THE first Herzstein lectures sponsored by the medical schools of the University of California and Stanford University were given on October 7, 8 and 9, by L. A. Orbelli, professor of physiology, Medical Institute of Leningrad, Russia, on "Recently Acquired Knowledge about the Autonomic Nervous System." These lectures were endowed by the late Dr. Morris Herzstein, of San Francisco.

APPLICATIONS for physical chemist, associate chemist and assistant chemist must be on file with the Civil Service Commission at Washington, D. C., not later than December 31. The examinations are to fill vacancies in the federal classified civil service, for duty in Washington, D. C., or in the field. The entrance salaries range from \$3,800 to \$4,400 a year for physical chemist, \$3,200 to \$3,700 a year for associate chemist, and \$2,600 to \$3,100 a year for assistant chemist. Higher-salaried positions are filled through promotion. The optional subjects for associate and assistant chemist are advanced inorganic chemistry, analytical chemistry, organic chemistry and physical chemistry. Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience, and on a publication or thesis.

THE Société Géologique de France was founded March 17, 1830, and is planning to celebrate its centenary by a general assembly of geologists in Paris on June 30, 1930, to which delegates will be invited from all parts of the world. Among its long list of distinguished presidents the society numbers Cordier,

Alexandre Brongniart, Constant Prévost, Dufrénoy, Elie de Beaumont, Alcide d'Orbigny, Daubrée, Albert Gaudry, Hébert, De Lapparent, Mallard, Marcel Bertrand, Michel-Lévy, Munier-Chalmas, Emile Haug. The society is now under the presidency of Dr. Pierre Termier, a member of the ancient Academy of Sciences in Paris. Meanwhile a jubilee volume is being prepared to which contributions have been invited of geologists and paleontologists representative of various geological societies and academies. As senior geologist of the U. S. Geological Survey and Gaudry medallist of the society Dr. Henry F. Osborn is contributing to the volume a memoir entitled "Ancient Vertebrate Life of Central Asia. Discoveries of the Central Asiatic Expeditions of the American Museum of Natural History in the Years 1921-1929."

AN annual prize of \$5,000 for distinguished service to agriculture in the United States is to be made available by Senator Arthur Capper, of Kansas. The prize is to be awarded first in 1930. The person to receive the prize is to be selected by a committee of seven which will formulate and announce the conditions to be met. The only requirement made by the donor is that the award be made for distinguished service to agriculture in the United States. The following are the members of the committee of award: John H. Finley, editor of the *New York Times*; Frank O. Lowden, ex-governor of Illinois and owner of Mississippi Farms; Carl R. Gray, president of the Union Pacific System; Walter T. Swingle, plant physiologist and agricultural explorer, U. S. Department of Agriculture; H. A. Morgan, president, University of Tennessee; James T. Jardine, director, Oregon Agricultural Experiment Station, and F. D. Farrell, president, Kansas State Agricultural College. Inquiries regarding the award should be addressed to the secretary of the committee, Mr. Floyd B. Nichols, Topeka, Kansas.

THE Turin Academy of Medicine has opened the contest for the fifteenth Riberi prize of about \$1,000. Scientific works on any subject pertaining to medical disciplines, provided they constitute real progress in the field with which they deal, may be entered. Printed or typewritten works (two copies being required) composed in Italian, Latin, French, English or German are acceptable. Printed works must have been published since 1927. In order to be given consideration, books to be entered in the contest must be received by December 31, 1934.

SOME years ago, according to the *Experiment Station Record*, a gift of 25,000 rupees by the late Sir Ganga Ram, of Lahore, was made to the Punjab government for the endowment of a prize to be awarded for the discovery or invention of a practical method

which would tend to increase the profitable agricultural production of the Punjab. This prize, valued at 3,000 rupees and known as the Maynard Ganga Ram Prize, may be awarded every three years if proposals of sufficient merit are received. A world-wide competition is provided, and the date for the current competition has been extended to December 31, 1929.

PRESIDENT W. W. CAMPBELL, of the University of California, has received word that the University Dental College has been awarded the gold medal of the Third Latin American Odontological Congress, held in Rio de Janeiro, Brazil, for the excellence of an educational exhibit of dental work arranged by Dean Guy S. Millberry.

UNIVERSITY AND EDUCATIONAL NOTES

MEMBERS of the board of trustees of the University of Pennsylvania have contributed a sum amounting to \$1,750,000 to the university. Of this amount \$1,000,000 was given without restriction, and the money has been used to cover deficits of \$800,000, leaving \$100,000 to be used for repairs and \$100,000 for current purposes. The remaining sum of \$750,000 will be used for the endowment of professorships.

WITH an anonymous gift of \$130,000 the University of Cincinnati College of Medicine is constructing a laboratory of applied physiology on the campus at Eden and Bethesda avenues, directly behind the anatomy department. A new field of research, according to the *Journal* of the American Medical Association, will be carried on here dealing with problems that concern the application of physiologic laws to industry, including the protection of workers in dangerous chemical and metal industries, food contamination and ventilation. An annual gift of \$30,000, also anonymous, provides for the maintenance of the laboratory.

MRS. AGNES H. ANDERSON, who in 1924 erected Anderson Hall on the campus of the University of Washington in memory of her husband, the late Alfred H. Anderson, has given \$50,000 to the university. The income from this gift, which is known as the Agnes Healy Anderson Trust Fund, is to be used chiefly for graduate research fellowships in forestry.

At Columbia University appointments have been made as follows: William Robert Torgerson, associate

professor of tropical medicine; Hans Smetana, assistant professor of pathology; Kenneth S. Cole, assistant professor of physiology; James L. Joughin, assistant clinical professor of neurology; Josephine B. Neal, clinical professor of neurology; Claus W. Jungeblut, associate professor of bacteriology, and Philip B. Buchy, assistant professor of mining.

DR. FREDERICK H. KRECKER, professor of zoology in Ohio State University and assistant director of the Franz Theodore Stone Lake Laboratory, has been appointed head of the department of biology in the college of liberal arts of Ohio University at Athens.

D. S. VILLARS has resigned his position as associate in chemistry at the University of Illinois to accept an assistant professorship in physical chemistry at the University of Minnesota.

DR. CALVIN N. WARFIELD, formerly of the University of Richmond, is taking up his work as the head of the physics department of the North Carolina College for Women at Greensboro.

PROFESSOR J. W. GREGORY has retired from the chair of geology at the University of Glasgow after a service of twenty-five years. *Nature* says that during the period the membership of his classes has risen from 15 to 400, and in his last session he lectured to the largest geological class in the British Isles, if not in the world.

DISCUSSION

PHARMACOLOGICAL INJECTIONS AND PHYSIOLOGICAL INFERENCES

IN a recent article in *SCIENCE*,¹ Cori remarks that for twenty-seven years 0.2 mg of adrenin per kilo or larger amounts have been used in hundreds of animal

experiments by many investigators and that if Cannon's judgment that such doses are "huge" and "far beyond physiological limits" is well founded it would be of far-reaching importance. That many investigators have commonly used such doses of adrenin does not prove them physiological. Unfortunately the lit-

¹ C. F. Cori, *SCIENCE*, 70: 355, 1929.